


INFORMATION PLEASE ALMANAC 1947


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JOHN KIERAN, *Editor*



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FOREWORD



ALL WISDOM—so the sages tell us—came out of the East. It is from the Orient, from ancient Arabia, that we derive the term “Almanac.” It was originally “Al Manahk,” meaning “the weather” or “the climate,” which is much the same thing to the man in the street or the farmer in the dell. Once upon a time an almanac might have been described (and was; see *Encycl. Brit.*) as “a book or table containing a calendar of days, weeks, and months of the year, a register of ecclesiastical festivals and Saints’ days, and a record of astronomical phenomena,” but centuries ago the makers of almanacs began adding sections of no ecclesiastical tinge whatever and much mundane material that had no relation to the movements of the stars in their courses. Now you can find almost anything you look for in a well-ordered almanac. At least, we hope you can find it in this one. We have not neglected the “register of ecclesiastical festivals and Saints’ days” and we are rather proud of our “record of astronomical phenomena,” but beyond that, with the help of authoritative organizations and individual experts in many fields, we have put together a book of facts and figures in a way to make such matters of record not only readily available but easily absorbed. We have tried to make the tables simple and the text informative and entertaining.

The first almanac published in this country came off the Bradford press in Philadelphia in 1687. The most famous of the colonial productions of this kind was, of course, *Poor Richard’s Almanack*, first published in 1733 by “B. Franklin, at the New Printing Office near the Market” in Philadelphia. *Poor Richard’s Almanack* was published annually for a quarter of a century, during which time it made Benjamin Franklin a rich man and a noted figure in his country’s affairs. We mention this purely as a matter of history and not gloatingly as an omen of financial or political significance to the editors or publishers of this almanac. Our office boy is authority for the blunt statement that nobody remotely resembling Benjamin Franklin ever worked in this office. Or even visited it.

In England in the days of *Georgius Tertius Rex* a publisher by the name of Thomas Carnan was three times thrust into prison for issuing and selling an almanac. We trust that no such foul fate will overtake us. The defendant, Thomas Carnan—eventually he was cleared in court, by the way—was jailed on the charge that his publication and sale of an almanac infringed on the monopoly granted by royal authority to the great universities, Oxford and Cambridge, and the Stationers Company of London.

There probably are some mistakes in this almanac, some errors in text and tables. We beg your indulgence for such lapses and we promise cheerfully to do better next year. In the interim, we hope you will like this almanac; it was made for you.

JOHN KIERAN, *Editor*

THE WHY AND WHEREFORE OF THE



DURING THE YEARS I was planning and preparing the INFORMATION PLEASE ALMANAC, my friends kept asking why I wanted to undertake such a formidable task. Did I know what I was getting into, they inquired skeptically. There were times when I was tempted to share their doubts as to whether the project really would materialize.

The idea of the almanac came from our radio program. Millions of questions have come to "Information Please" in its nine years on the air. Always we have asked that the correct answers be included, but in a great many cases they were not. Sometimes this was due to laziness; but very frequently our question-senders explained that they lacked the necessary reference books. We received this comment so often that I realized that many people had a need for a comprehensive reference book.

True, many reference books are available, but most of them are specialized and expensive. The average family cannot afford a collection of reference works. Obviously, there is a need for one book that will do the work of many. And that book must not only be authoritative, but also organized so well that research at home will be simple, even enjoyable.

We studied every type of reference book and found that the almanac type was the best suited for presenting a maximum of information on the widest variety of topics.

In his foreword to this volume John Kieran says "you can find almost anything you look for in a well-ordered almanac." Yes, John—provided you first find the almanac that really is *well-ordered*. Too often almanacs throw at the reader a mass of undigested data which has accumulated over the course of years. Like Topsy, almanacs have "just grown."

In our task of creating a modern almanac it has been a definite advantage to start from scratch. We could develop the book according to plan—we could put into it scholarship, judgment, editorial ability. Really organize it.

The first step was to find the right editor. That was easy. Any one of a million "Information Please" listeners could give the answer—the amazing John Kieran.

The next problem was how to assemble something like 1,500,000 words and figures on countless subjects. Even the omniscient John Kieran couldn't pull all that out of his head. We decided to get our material from the most outstanding authorities we could find—both individuals and institutions. This book would not be a conglomeration of anonymous information, but a collaboration of experts.

There was another thing. Facts are fun. They should be presented in such a way that they don't scare you, but give you enjoyment. We wanted to build a book that people from Maine to California could use—or browse through—with real pleasure.

To achieve this we employed modern journalistic technique. After the researchers gathered our facts, the data were turned over to a staff of top rewrite men to be put in the most readable form. We have tried to make statistical tables interesting by interweaving with them narrative text, charts, maps. When we invited specialists to do articles, we sought those who we knew were good writers. For instance, the biographies of the Presidents are not done in a perfunctory manner, but are written by Arthur Schlesinger Jr., who won the Pulitzer prize for his "Age of Jackson."

However authoritative and interesting we could make our material, we also had to make the book readable from the point of view of type. So we engaged typography experts to give our book high legibility and at the same time enable us to pack an almost unlimited number of facts in a limited space. We conducted reading tests with many varieties of type and among many groups of people. I hope you find the result good.

INFORMATION PLEASE ALMANAC



Our purpose has been to cover a great variety of interests so the book will be useful to many people for many purposes. You will find here material that you can't find anywhere else—for example, a table on the world's riches and resources; a forty-page travel guide for every country in the world; a chronology of world history in headline form from 4004 B. C. through 1946. And our review of 1946 includes not only the news highlights, but articles by specialists in the various fields such as sports, drama and radio. We have devoted generous space to this section because we think as the years go by people will enjoy looking back in our annual almanacs for the story and records of the previous years.

Then there was the matter of the index. I knew how vital this was, because I've often had to look things up in a hurry just before our radio program went on the air. I was determined to give our INFORMATION PLEASE ALMANAC an index that would make fact-finding easy—not baffling. We engaged an expert index organization, one of the best in the publishing field, and gave them as many pages as they wanted. They produced an index which carries twice as many entries as any almanac or yearbook I know of in this country; and yet I think the index is simple enough for a seventh-grade pupil to use.

How do you tell what information should be included in an almanac and what shouldn't? Frankly, we don't know. But we intend to find out as we start work on our 1948 edition. We plan to conduct surveys of users of this almanac and of librarians throughout the country to determine the usefulness of every section in the book. If only a few people are interested in a section, we will drop it to make room for more useful and interesting material. We are determined to improve the book from year to year—and we would be glad to have your suggestions.

We have gone to great pains to avoid errors. The material has been scrutinized as many as six times. A typical manuscript, for example, was read first by our Information Please organization, then by a trained newspaper copyreader. Set in type, it was combed for errors by the publisher's proofreader, then by the author, then by our organization. Finally, the page proofs and foundry proofs were gone over. However, maybe you will spot an error that everybody missed; if so, we'd like to hear about it.

It certainly has been a monumental job getting out the almanac. You can plan it for years, as we did, but the actual work of writing and assembling obviously has to be done in the current year in order to be up to date. We were able to accomplish it because we had so many individuals and organizations working on different sections at the same time. The cooperation was wonderful. I am grateful to more people than I have space to list, but I might mention a few of them:

At the top of the list are the organizations which contributed major sections—The Encyclopaedia Britannica, The Research Institute of America, The American Express, Who's Who, and the N. Y. *Herald Tribune*. The *Herald Tribune* contributed not only as an organization but its staff played important roles in preparing this book. Included among these were Joseph Herzberg, City Editor and Al E. Davies, Assistant Night Editor.

Important individual contributions were made by Marcus Duffield, our editorial adviser on World Affairs and History, Cyrus Leroy Baldridge, our Art Director, who also paged the entire book, and Gordon J. Kahn.

We want to express our appreciation to members of our permanent staff who gave up many weekends and evenings. A few of them are Muriel, Leonard, Joe, Ronnie, Louis and others.

DAN GOLENPAUL

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WASHINGTON

by

ELMER DAVIS

News analyst for the American Broadcasting Company,
former Director of the O.W.I.



WASHINGTON in the first postwar year was a place where every prospect pleases—more even than usual, thanks to a remarkably cool and comfortable summer—and if its inhabitants felt more than usual that man is vile, the vileness was mostly out around the country, with its consequences tumbling in on a harassed government. A strange year—with the head of an employers' association publicly demanding higher wages for his employees; with Supreme Court Justices using language about each other that would seem indecorous in Congress; and with the chairman of the Republican Congressional Campaign Committee accusing the Administration of "ingannation"—a term that may be a commonplace of political invective in Blanchester, Ohio, but stood the capital's etymologists on their heads.

Yet the pattern was simple. A President who had inherited the Roosevelt policies without the Roosevelt prestige (or the Roosevelt genius) was gallantly trying to continue them in the face of a hostile Congress. Roosevelt too had had a hostile Congress, but in wartime it generally did what had to be done. Truman, in the postwar letdown, had to deal with a Congress not only hostile but irresponsible; its majority was an alliance of Republicans and conservative Democrats, powerful in negation but null and void when it came to any positive program. On top of which it was a year of continual strikes—industrial workers, miners, railroad men, seamen; with stock raisers and stock feeders so generally withholding livestock from the market that this had the effect of a strike too. And the Administration was damned alternately for not stopping them and for not trying to stop them, but damned for something anyhow.

When the year began the Administration was still committed to carrying the wartime wage-price-stabilization program through the transition period; committed also to the doctrine that in many industries wages could be increased without price increases—which might have proved true if its major premise, full production, had ever been attained. The General Motors strike was on—and with others coming up, the President again asked Congress to pass his program of social legislation, which he hoped might remove the principal causes of strikes.

They never did pass it, except for a few odds and ends that added up to nothing much, preferring to treat the symptoms rather than the disease. Then came the steel strike, which was settled at the cost of a mortal wound to the stabilization program. A wage increase of eighteen and a half cents an hour was compensated by a price boost of five dollars a ton—about half way between what OPA thought producers should get, and what some of them wanted. It was insisted that this was only a bulge in the price line, that the line would still be held; but the precedent of paying for wage increases with price increases, once set, had to be followed in one industry after another. Before long the line was nothing but bulges; and with the maritime strikes in early fall the whole wage-price-stabilization policy was in principle abandoned. Removal of meat-price

controls in October sank it a little farther; and immediately after the election the President ended all controls on wages and all on prices except on sugar, rice, and rents; thus giving up an attempt to maintain a semi-controlled economy which had never had much chance of success.

It had not held down prices, and it had not stopped the strikes. With steel and motors in production again, John L. Lewis took his coal miners out on their annual walk. That one was settled near the end of May, but only after the government took over the mines and made a contract with the union which the mineowners were reluctant to assume. On November 1st Mr. Lewis claimed that the government had "breached" that contract (his locution, not mine) and the whole coal question was thus tossed back into the field of argument.

The coal strike had threatened to shut down the United States, eventually; just before it was settled the railroad strike made that threat immediate. Called by the trainmen and engineers, who balked at a settlement accepted by the other rail unions, it raised the question whether the government was running the country; and its solution answered that question, if nothing else.

May 25th was a day of such tension as Washington had not seen since December 7, 1941. The President had taken over the railroads and broadcast his determination to keep them running; and that day he came before Congress and asked for emergency powers to deal with strikes against the government. The railroad union leaders had capitulated just before he started speaking; nevertheless the House of Representatives passed with little debate and with few dissenters a sweeping law providing, among other remedies, for the drafting of strikers and their union leaders into the army—a singular penalty, for a government which was then trying to make military service attractive. But when the Senate got around to the bill the emergency had passed; its most drastic provisions were stricken out by an alliance of liberals and conservatives, equally opposed to them on opposite grounds; the two versions of the bill never went to a conference settlement, and Congress eventually adjourned leaving the government with no additional emergency powers at all—a lack which was to be felt, later.

The President had also asked Congress to appoint a joint committee to study industrial relations, and recommend permanent labor legislation at the next session. Nothing was done about that either—perhaps because the kind of permanent legislation that suited the bipartisan majority had already been written into the Case bill. This measure (whose assorted restrictions on unions included none that would have prevented the great strikes of the year) ran into a Presidential veto which the House barely upheld. In his veto message the President outlined the kind of permanent labor legislation he would accept; but by that time Congress was in its usual end-of-the-session jam, and preferred to put it off till next year.

In May the Secretary of Labor had said, "We just can't have a maritime strike"; but by fall we had had a series of them, one union after another going out and successively paralyzing the American merchant marine. All of which began with the singularly inept decision of some shipping operators to pay higher wages to Federation of Labor seamen than to CIO seamen doing the same work; why the Maritime Commission ever approved that is almost as big a mystery as why it was ever done in the first place. But from early spring public attention was increasingly absorbed by the stock raisers' strike that spearheaded the drive against price control.

Powerful interests led by the National Association of Manufacturers had been demanding the immediate end of price control (which everybody knew would have to be abolished in a year or so); but it was the farm lobby that was most powerful in Congress and it was the farmers' action that built up most sentiment against continuation. As June 30th approached when the price-control law would expire, the flow of livestock to the markets virtually stopped; stock raisers were holding back till the lid was off. Yet the manufacturers came off better than the farmers in the bill that finally passed

Congress, thanks chiefly to the Taft amendment allowing them prewar rates of profit with allowance for cost increases since; and it was the Taft amendment that was chiefly attacked in the President's veto message on June 29th—so vigorously that it looked as if the ground was being cleared for a Taft-Truman fight in the Presidential election of 1948.

The veto was sustained and in mid-July Congress passed another price-control bill, minus the Taft amendment, which the President reluctantly signed. Chester Bowles, target of such vicious attacks as no man in Washington had had to take for years, had resigned; Paul Porter, succeeding him as Price Administrator, undertook to operate under the new law which a Congressman had called not good enough for the friends of price control, or bad enough for its enemies. Price controls on meat were restored in September, after two months in which there had been plenty of meat for people with plenty of money; the Secretary of Agriculture, now in authority over food prices, was so reckless as to say that farmers could make enough money at ceiling prices but most farmers seemed to think otherwise. The stock raisers again kept their stock down on the farm, and by October the whole nation was raising an anguished outcry for meat which threatened to drown out all the other arguments in the Congressional campaign. On October 14th the President yielded to the clamor and ended meat-price controls, putting the blame on a few men in Congress who, he said, were determined to wreck the control program at whatever cost to the people. Meat prices jumped up, then gradually slid down as consumers showed reluctance to buy at the peak; but the action came too late to have much effect on the campaign.

Congress had adjourned on August 2nd, having produced an apparently unworkable price-control bill and a draft bill of which the best that could be said was that it was not so bad as had once seemed probable; and, after long and acrimonious argument, it had approved the British loan. As usual in the last-minute rush, some bad bills were passed and some good ones were lost sight of; but other good ones unexpectedly got through. Congress passed the La Follette-Monroney Act modernizing its own machinery—not so much as is needed, but more than skeptical old-timers had ever dared to hope—and incidentally raising its own salaries; but Congressmen who are worth anything at all are worth enough to live on, which they are hardly getting now. And it passed the McMahon bill for control of atomic energy, though not till the House had indulged in one of its old-fashioned Saturday-afternoon lynching bees and kicked it to pieces—nominally in the interest of national security, actually in that of private monopoly. But the essentials were restored in conference, thanks largely to the firmness of the Republican Senatorial conferees. The record might have been worse; it might also have been immeasurably better. Indeed it was due chiefly to the tact and the unwearied patience of such leaders as Senator Barkley and Speaker Rayburn that any decent legislation was enacted at all.

The President had other troubles. Of the team of wild horses that Roosevelt had driven in harness in the early New Deal days only two remained in the Cabinet, and those two successively broke the traces and galloped off on their own. Harold Ickes resigned on February 12th, and explained his action next day at a news conference that drew more reporters than would commonly be brought out by anything but a fire in the National Press Building. Honest Harold—a thorny character, but about the best Secretary of the Interior within living memory—had quarreled with Edwin W. Pauley, treasurer of the Democratic National Committee. Mr. Pauley, he said, had asked him to let up on his claim of Federal ownership of tidewater oil lands, suggesting that such a renunciation might bring in a lot of money to the Democratic campaign fund. Mr. Pauley said it wasn't so; Mr. Ickes stuck to his story, and built on it a cogent sermon to the effect that of all Federal departments, the Interior above all must be free from any suspicion of the association of politics with money.

But Honest Harold had other complaints. "The political gnats," he said, "are swarming"

—a phrase taken as an allusion to the personal friends and advisers, mostly from Missouri, with whom the President had surrounded himself. Also the President had said that Mr. Ickes might very well be mistaken in his recollection; and you say that about the fiery Harold only at your peril. The result was a fireworks display which looked as if it would provide excellent campaign material for the Republicans.

Yet it had singularly little result. The Republicans chose to focus on other issues; Mr. Pauley presently went abroad as Reparations Commissioner and rendered useful service to the country; and the President took the bite out of Mr. Ickes's most valid criticism—the need of keeping the Interior Department above suspicion—by appointing as his successor Cap Krug, whose proved integrity and capacity removed any question on that point. Later, by an equally good replacement, the President undid some of the damage that had been done by the far more serious case of Henry Wallace.

Mr. Wallace on a Tuesday (September 10th) showed the President the manuscript of a speech he proposed to make on the following Thursday to a New York audience which would certainly contain some Communists and more fellow-travelers—a speech calling for a softening of our policy toward Russia. By government procedure he should have shown it to the State Department (which would have refused to approve it); the President should have read it carefully but apparently did not—influenced perhaps in some degree by his personal modesty, and by generosity toward a man who had been his chief competitor for the nomination. On Thursday morning reporters who had seen advance copies of the speech asked the President if he had approved it; he said he had, all of it; and when asked if it did not propose a considerable departure from the policy Mr. Byrnes had been following (with Republican support) he said they were exactly in line.

But when the speech was delivered almost everybody else found the two policies very different indeed. Some preferred the Wallace policy; most people, apparently, did not. And while some of those who howled the loudest for national unity in support of our foreign policy were Republicans who had been conspicuous and bitter opponents of our foreign policy in 1940 and 1941, nevertheless the clamor was so general that on Saturday the President had to explain. When he approved Mr. Wallace's speech, he said, he approved only his right to say it; he did not approve the policy it advocated and the foreign policy of the United States was the same as ever. But that was not enough. Mr. Byrnes's position at the Paris Peace Conference, already shaken, would be untenable if a member of the Administration continued to attack his policies. On the following Wednesday Mr. Wallace saw the President and promised to make no public statements or speeches till the Paris conference had ended. But even that would not do; the Paris conference would by no means end our dealings with Russia, which Mr. Byrnes could hardly conduct effectively with one of his colleagues continually demanding something else. So on Friday the 20th the President asked for, and obtained, Mr. Wallace's resignation; perceiving now a "fundamental conflict" on foreign policy which he had not noticed the week before, and declaring that "our foreign policy remains in full force and effect without change."

Not for twenty-five years had Washington seen anything approximating such confusion. Aside from its effect on our foreign relations, which can not yet be calculated, it promised to have considerable political consequences; for with Henry Wallace chased off into the wilderness a material number of left-wing voters, while unable to go over to the Republicans, might choose to stay home on Election Day. Further, in a situation where both men had been at fault, friends of both Mr. Wallace and Mr. Truman could hardly escape the conclusion that the graver responsibility for the series of blunders had been the President's. Yet once again he undid much of the damage by choosing Averell Harri-man as Mr. Wallace's successor as Secretary of Commerce—an appointment almost universally praised; and Republicans made much less out of it than might have been expected, preferring to find their chief issue in the cry of a carnivorous populace for meat. (An exception was their National Chairman, Brazilla Carroll Reece, who even after Wal-

lace had been thrown out continued his campaign to persuade the public that the government was dominated by "Red Fascists.")

Whatever the effect of that argument (less, probably, than the accumulated weariness of the country with a party long in power) the election on November 5th gave the Republicans a decisive majority not only in the House of Representatives, which had been expected, but also in the Senate. This landslide brought a number of proposals, from Democratic sources, that the President should resign, as would a British or French Prime Minister after such a sweeping repudiation, and (by a method permitted by the Succession Act) turn over the White House to the Republicans. Mr. Truman, however, preferred to follow the spirit of the Constitution as it stands and remain in office; but he gave assurance that he would cooperate with Congress in a non-partisan spirit and Republican leaders promised similar cooperation with him. Thus began what was called the second honeymoon of the Truman administration; but veteran Washington observers had little confidence that it would last.

In this turbulent year even the august Supreme Court was shaken when Justice Robert Jackson, on leave as prosecutor at the Nuernberg trials and perhaps under some strain from his labors there, wrote a letter to the Judiciary Committees of the House and Senate accusing his colleague, Justice Black of tending to bring the Court into disrepute. His stated reason was the fact that Justice Black had sat in cases argued by his former law partner (as many Supreme Court Justices had done before him); but it was recalled that Justice Black had been quoted by a Washington columnist in sharp criticism of a decision by Justice Jackson. This was no personal controversy, Jackson insisted, it involved the reputation of the Court.

Others thought it also involved either Justice Jackson's ambition to succeed the late Harlan F. Stone as Chief Justice, or his fear that Black would be appointed to the post. But before his protest was made public the President had appointed Secretary of the Treasury Vinson as Chief Justice. Mr. Vinson, in long service on the bench, in Congress, and in the executive branch had shown himself able to play any position in the infield or outfield; but it began to seem that what the government needed was a man who could play them all at once. When the Court met again in October, C. K. Berryman, who can say more in a cartoon than other men can in a long editorial, pictured Vinson lining up the Associate Justices with the admonition, "Remember, no scuffling on the bench! No throwing spitballs!"

A strange year—bitter, turbulent, and unfruitful. A typical first postwar year, said men with historical memories; less injurious to the national interest, at any rate, than 1866 or 1919. But bad enough. As it drew to a close, persons with a taste for the placid were heartened by a sign that Washington was coming back to normalcy—the announcement that the White House would resume the traditional series of State dinners for officials and diplomats, suspended in the war years. Others who loved not placidity but comfort saw in this a dire premonition that tails laid aside for the duration while Washington won the war in dinner coats must be taken out of the moth balls, and that the boiled shirt would once more torment men who had grown used to soft collars by lamplight as well as by daylight. Still, Washington at any rate seemed getting back to normal.

Yet one item in the business that Congress left undone raised a question as to how much normalcy Washington can count on hereafter. Buried in the files of the Judiciary Committee of the House is a resolution introduced by Mr. Trimble of Arkansas for a constitutional amendment, making provision for the selection of an interim President "when there is no President, Vice President, or person provided by law able to act as President" (there are seven of them now); and for the choice of an interim Congress "when a majority of the Senate and of the House of Representatives are unable to perform their duties." In other words, it has already seemed worth while to at least one member of Congress to make provision now of means to carry on the government, if Washington should be wiped out by an atomic bomb.

SPORTS OF 1946

by

GRANTLAND RICE

dean of sports writers

THE SPECTATORS, not the competitors, were the astonishing and outstanding feature of the sports whirl of 1946. Never before in the history of amateur or professional sports in the United States did so many wild-eyed enthusiasts storm through the turnstiles of outdoor stadiums and indoor arenas to witness almost any kind of competition the promoters had to offer. Attendance and gate receipt records were swept away in practically every field of sport with two notable exceptions: the attendance and gate receipt records for boxing still date back to the Dempsey-Tunney clashes in Philadelphia and Chicago, and 1946 was not quite as big a year on the turf as was 1945. Aside from that, the attendance at sports spectacles was overwhelming and the money involved was enormous.

The economists probably can explain it in terms of "surplus currency" and "lack of consumers' goods" because the standard of competition offered to the onlookers certainly was not top grade. Not all the star athletes who had gone off to the wars had returned to the field of play, and many of those who had returned were the worse for wear and tear. Certainly the 1946 collection of leading attractions on the field of sport didn't compare with Babe Ruth, Jack Dempsey, Gene Tunney, Bobby Jones, Bill Tilden, Earl Sande, Rogers Hornsby and a few others who added so much to the lure of sports after World War I. The turf of 1946 offered no such attraction as Man o' War, the postwar sensation of a generation ago.

But those ancient attractions didn't begin to draw the crowds that 1946 saw in all directions where sports spectacles were the magnet. Major league baseball clubs set attendance records that the most optimistic club treasurer never would have dreamed of a decade ago. Football, basketball, tennis and golf piled up attendance records all along the line. The West Side Stadium at Forest Hills turned away would-be ticket purchasers two days running because the stands were overflowing on the semi-final and final day of the national tennis championship that saw John Kramer of California, ex-lieutenant in the Coast Guard, defeat Tom Brown from San Francisco, only lately out of a soldier suit. There were 50,000 paid admissions to a golf tournament! The Brooklyn Dodgers, with one of the smaller parks on the circuit, set a new National League attendance record far beyond anything that anybody in baseball ever expected. The New York Yankees, with a third-place club, reached an all-time high in attendance for any baseball club. Even the Phillies almost doubled their best previous attendance record.

Only the New York race tracks, where special taxes had been added, showed a slight falling off in attendance and betting totals. But no one starved in the racing game—or no one who was on the right side of the mutuel windows, which isn't the front side. In short, the tracks did well for themselves. And there was the King Ranch's Assault to win the Triple Crown of the American Turf—the Kentucky Derby, the Preakness and the Belmont—and rank with such famous predecessors as Sir Barton, Gallant Fox, Omaha, War Admiral, Whirlaway and Count Fleet. On the financial side, "added money" was tossed around freely by track officials and \$50,000 races were common.

Aside from inflation in attendance, the feature of the baseball year was the terrific race in the National League that culminated in the tie between the Cardinals and the Dodgers at the end of the regular playing season, which was something entirely new in baseball. It's true that there was a tie in 1908 between the Cubs and the Giants but that was because of the famous "Merkle Incident" and a game that had to be replayed. In 1946 the Dodgers and Cardinals were tied when both clubs had finished their full schedules. The play-off schedule was hurriedly devised while the Red Sox, who brought Boston its first pennant in 28 years, kept in practice by sparring with a pick-up team of American

League stars. The World Series, though it was fought right down to the seventh game before the Cardinals won, was something of an anticlimax in the wake of the Cardinal-Dodger feud that saw the Cardinals take two play-off games from the Dodgers to move into the seesaw struggle of the World Series and emerge victorious over Joe Cronin's—and Tom Yawkey's—rich Red Sox.

It was known from the start that football would be more than slightly terrific in 1946, and that's the way it turned out. Plenty of husky young fellows were back from the wars and the GI Bill of Rights, as well as previous touches of campus careers, sent a lot of them to college and from there into football suits for the autumn revelry. Graduate managers and directors of athletics were announcing in August that they had no more seats available for their October and November big games. Many of the traditional contests could have been sold out four times over if that many tickets had been available. There was, of course, a notable upgrade in the quality of play over that seen on the college and professional gridirons in the war years, but the experts predict bigger and better football teams in 1947. The coaches and trainers said that some of the returned athletes were still feeling the effects of tropical illness or vitamin-deficient diets or other temporary and service-acquired afflictions. It was said that men returned from the Pacific were inclined to be weak on their legs, and a football player does need good legs. But it was a great football season, and if 1947 is to be a better one, may I be there to see!

There were two features of the 1946 boxing program that stood out. One was the ease with which Joe Louis disposed of Billy Conn and Tami Mauriello in defense of his heavyweight crown. The other boxing feature of the year was the knock-down-and-drag-out battle in which Tony Zale, the middleweight champion who was four years in the service, came back to beat Rocky Graziano in what fight experts agreed was one of the best brawls in modern ring annals.

The green stretches of the golf fairways furnished an interesting scene in 1946. The national open championship was won by Lloyd Mangrum, an ex-GI from the European theater, and the national amateur championship—this is one for the book!—was won by an ex-professional, Ted Bishop. The football stars of the autumn were too numerous to mention, but the leading lights of the baseball campaign were Bob Feller, with a new major league strikeout record of 348, Harry the Cat Brecheen, for his World Series pitching, Stan Musial and Mickey Vernon as the batting leaders of their respective leagues, and Hank Greenberg, the ancient gentleman who led both leagues in home runs after some critics had voted him dead and ordered him buried.



THE ATOM TODAY AND TOMORROW

by

WILLIAM L. LAURENCE, of the N. Y. Times
winner of Pulitzer Prize for stories on the Atom Bomb

THE uranium atom was actually split for the first time by Enrico Fermi in 1934, a young physicist at the University of Rome. Luckily for the world, as we know today, he did not realize what he had done. Had he done so, it is almost certain, that the Nazis would have had atomic bombs ahead of us.

The atomic bomb, as well as the release of the vast energy within the nucleus of the uranium atom of atomic weight 235, was made possible by the discovery in 1932 of the atomic particle known as the neutron by Sir James Chadwick, at the famous Cavendish Laboratory at Cambridge University. The neutron, as its name implies, carries no electrical charge and is able to penetrate the electrical barrier surrounding the atomic nucleus. Its discovery, therefore, gave scientists the means to penetrate the heavily

guarded citadel of the atomic nucleus, in which more than ninety-nine percent of the energy of the universe is concentrated.

The discovery of the neutron also gave man a true picture of the atom. We know that it is constituted in the manner of a miniature solar system, a central nucleus, like the sun, surrounded by electrons revolving around it in the manner of planets in various orbits. The nucleus of all the elements, with the exception of hydrogen (the first element), is composed of a combination of protons (atomic particles carrying a fixed unit of positive electricity) and neutrons. The number of protons in the nucleus determines the nature of the element.

There are ninety-two natural elements, beginning with hydrogen at number one and ending with uranium at number ninety-two. In addition there are about 300 twins of these elements known as isotopes. For example, hydrogen has only one proton in its nucleus, surrounded by an electrically negative electron, which makes the atom neutral. Helium has two protons and two neutrons in its nucleus, surrounded by two negative electrons to balance the protons. The sixth element on the atomic table, carbon, has six protons and six neutrons in its nucleus, surrounded by six negative electrons. The total number of protons and neutrons in the nucleus determines the atomic weight of an element, whereas the number of protons alone determines the atomic number. Thus carbon is the sixth element with an atomic weight of twelve.

There are two principal types of uranium, the ninety-second and last of the natural elements. One of them contains 92 protons and 146 neutrons in its nucleus, which gives it a total atomic weight of 238. The other, much more rare, contains ninety-two protons and only 143 neutrons in the nucleus, which gives it an atomic weight of 235. This twin, or isotope, of uranium, is the element we are most interested in, for it is the only natural element that can be split on a practical scale. With it man can make two other elements out of uranium 238 and thorium, to serve the same purpose. Without uranium 235 (U.235) these other two elements would be useless.

Immediately after the discovery of the neutron scientists all over the world began using it as a projectile against the nuclei of various atoms. Fermi was curious to find out what would happen if he fired a neutron into the nucleus of the uranium atom. What he wanted to know was whether the addition of one neutron to the nucleus of an atom of uranium 238 would create an element beyond uranium of atomic weight 239. The results he observed, which as we know today was the splitting of the uranium atom in the uranium mixture he was experimenting with, were so mystifying that it set physicists all over the world to work.

For five fateful years the work continued. The final break came, ironically enough, in Germany, where a scientific team of two men, Drs. Otto Hahn and Fritz Strassmann, and one woman, Dr. Lise Meitner, was working on Fermi's mystery. What they saw posed a mystery even greater than the one they had set out to solve. The uranium they had started with had somehow miraculously transformed itself into barium. The phenomenon was so contrary to all scientific concepts, that neither Dr. Hahn nor Dr. Strassmann could bring himself to draw any conclusions. They merely reported what they saw and let it go at that. The date, now famous in the annals of man, was January 6, 1939.

Meantime Dr. Meitner found herself exiled from Germany. She and another fellow exile, Dr. O. R. Frisch, talked it over and came to a famous conclusion. The barium, which contains 56 protons, must have come as the result of the splitting of the uranium atom into two unequal parts, the other part being krypton, containing 36 protons in its nucleus, accounting for the total of the 92 protons in the nucleus of uranium. If that were the case, they reasoned, then the uranium atom not only split but, more important still, released a tremendous amount of energy.

They lost no time in testing their hypothesis and, sure enough, they found they were right. Man at last had split an atom and released part of its vast energy. On measuring the amount of energy liberated they found that it was equal to 200,000,000 electron volts per atom. This meant that the splitting of one pound of uranium would release the

energy equivalent of 3,000,000 pounds of coal and an explosive energy equivalent to 10,000 tons of TNT.

Drs. Meitner and Frisch communicated the news to Professor Niels Bohr, then in the United States, who lost no time in announcing it at a scientific meeting in Washington. In a matter of days the experiment had been corroborated in many laboratories throughout the country. Man at last had a key to the vast energy locked up within the atom.

It was soon recognized, on the basis of pure theory at first (presented by Prof. Bohr and Dr. John Wheeler of Princeton), that it was the U.235 that was being split. In a matter of weeks another vital discovery was made almost simultaneously in France and in the United States, namely, that when a uranium 235 atom is split by a neutron, additional neutrons are liberated from the split atom to continue the process of splitting other atoms, thus starting what is known as a chain reaction, one atom setting off another in the manner of a firecracker.

This second discovery immediately brought the ominous realization that uranium fission held the possibility of providing the most destructive weapon. Soon the frightening news began trickling out of Germany that the Nazis were concentrating on this very problem. Our physicists, particularly the exiles among them, headed by Dr. Albert Einstein, Fermi, Leo Szilard and others, brought the matter to President Roosevelt, who appointed a committee of experts to study the problem. Thus started the greatest race against time in history.

On Dec. 6, 1941, one day before Pearl Harbor, the preliminary work had progressed to the point where it was recognized that an all out effort was necessary if we were to stay in the race, as by that time it looked almost certain that Germany was at least one year ahead. By Dec. 2, 1942, a team headed by Prof. Fermi at Chicago demonstrated for the first time that a chain reaction was possible. This brought the race into its final and decisive phase.

To bring the work out of the scientific laboratory into large-scale industrial production a new Army organization, named the Manhattan Engineer District, was created and put in charge of Major General (then Brigadier General) Leslie R. Groves. Under his direction, and with the cooperation of scientists, industrialists and labor, was created the greatest industrial empire of its kind in history. From an initial appropriation of \$6,000, the project eventually spent a total of \$2,000,000,000, with plants covering hundreds of thousands of acres scattered over many parts of the United States and Canada. Scientists of many lands, including many exiles as well as British, Canadian and French scientists, worked against time to help win the race.

The main plants were in Tennessee, the State of Washington and at Los Alamos, New Mexico. There were also three great research centers established at Columbia University, the University of Chicago, and the University of California, as well as smaller research centers at more than a score of universities and research institutions.

The gigantic plants at Tennessee, located on a 59,000 acre tract at Oak Ridge, near Knoxville, were designed to concentrate uranium 235 by two different methods. The plants at Hanford, Washington, were designed to produce plutonium, a man-made element, also known as element 94, which is produced in an "atomic boiler" (known as an atomic pile) by allowing the neutrons liberated from the split atoms of uranium 235 to enter the nuclei of the atoms of the much more abundant uranium 238. One extra neutron entering the nucleus of the uranium 238 causes two of the neutrons inside the nucleus to become transmuted into protons, so that the nucleus now contains 94, instead of 92, protons. The extra neutron also increases the atomic weight from 238 to 239.

Plutonium 239 is as fissionable as uranium 235 and has the added advantage that it is a different element from uranium, so that it can be separated from its parent substance (uranium 238) by chemical means, which are much easier than the physical methods necessary to separate uranium 235 from uranium 238. The last two are always found in nature as a mixture and always in the same ratio of 140 parts of U.238 to 1 part of U.235. No possibility exists for finding a more concentrated source of the latter.

Both uranium 238 and thorium (atomic weight 232) are fissionable with fast neutrons but neither liberates enough neutrons to maintain a chain reaction. However, just as uranium 238 can be converted into plutonium 239, so thorium 232 can be converted into uranium of atomic weight 233, an element not found in nature, which has the same fissionable-chain reaction properties as uranium 235 or plutonium. The process for transmuting thorium 232 into uranium 233 is the same as the one for transmuting uranium 238 into plutonium. To do so, it is, of course, necessary to mix it with uranium 235 or with plutonium. Thus it can be seen that without uranium 235 to start with neither plutonium nor uranium 233 could be produced out of uranium 238 or thorium. In other words, a nation not possessing fairly large stocks of natural uranium could not produce either atomic bombs or atomic power no matter how much thorium it had.

By July, 1945, we had available both uranium 235 and plutonium in large enough quantities to produce atomic bombs of two types, the so-called Hiroshima and Nagasaki types. This, however, does not mean, as is generally believed, that the difference between them is due to the difference between uranium 235 and plutonium.

The first atomic explosion took place at 5:30 on the morning of Monday, July 16, 1945, in the bleak New Mexico desert on the northwestern corner of the Alamogordo Air Base. The first atomic bomb used in warfare was dropped from a B-29 on Hiroshima on Monday morning, 8:15 A. M., Hiroshima time. The second was dropped on Nagasaki three days later and brought the greatest war in history to a victorious end.

The estimates that the general effect of one atomic bomb would be equal to the explosion of 20,000 tons of TNT were borne out by later investigations on Hiroshima and Nagasaki. Hiroshima suffered 135,000 casualties, which included more than 50 percent of its population. It was comparable in size to Providence, Rhode Island, or Dallas, Texas. Nearly half, or 66,000 of the casualties, were deaths, the greatest number of which occurred immediately after the bombing. Nagasaki, a city of 196,000, suffered 64,000 casualties, of which 39,000 were deaths. Burns caused about 60 percent of the deaths in Hiroshima and 80 percent in Nagasaki. Falling debris and flying glass caused 30 percent of the deaths in Hiroshima and 14 percent in Nagasaki.

The investigation showed that the effects of the atom bomb on human beings were of three types: (1) Burns, including flash burns caused by the instantaneous heat and light radiation, remarkable for the great ground area over which they were inflicted. (2) Mechanical injuries, resulting from the flying debris, falling buildings and blast effects. (3) Radiation injuries, due entirely to gamma rays and neutrons emitted at the instant of explosion and similar to the results of severe X-ray overexposures. The investigations also revealed that no harmful amounts of persistent radioactivity were present after the explosions, this for the reason that both bombs were exploded at a considerable height from the ground.

The bomb explodes in the incredible time of one-tenth of a millionth of a second. At the center of the explosion the temperature reaches 100,000,000 degrees Fahrenheit, or about 10,000 times that of the surface of the sun. It produces pressures equivalent to many millions of atmospheres and creates winds traveling at about 1,000 miles per hour.

All energy is produced by conversion of matter into a state in which it can do work. In ordinary chemical energy, such as the burning of coal or oil, some of the outer electrons are converted into energy. In the case of atomic, or rather, nuclear energy, some of the matter of the protons and neutrons in the nucleus of the atom is transformed into an energy state. The only difference is that in nuclear energy the amount of matter thus transformed is millions of times greater. The transformation takes place according to the famous Einstein formula that the amount of energy in any given mass is equal to the mass of the substance multiplied by the square of the velocity of light ($E=Mc^2$). This reveals that one gram of matter is the equivalent in energy to 25,000,000 kilowatt hours.

In terms of explosives this means that one kilogram of U.235 or plutonium is the equivalent of 20,000,000 tons of TNT. However, in the process of fission only one-tenth of one percent (i.e., one one-thousandth) of the mass of each atom is converted into energy.

This means that the complete fission of one kilogram of U.235 or plutonium would yield an equivalent of no more than 20,000 tons of TNT. Since one one-thousandth of a kilogram is one gram (less than half the weight of a dime) it means that the conversion of that minute amount of matter into energy is sufficient to yield the destructive power of one atomic bomb. This does not mean, of course, that the atomic bomb weighed only one kilogram, for the matter of the bomb's efficiency, still a highly guarded secret, must be taken into consideration. The figure 20,000 tons-per kilogram represents an efficiency of 100 percent.

According to the unanimous opinion of scientists there can be no military defense against the atomic bomb. Nor can the secret be kept for more than five to fifteen years. Eventually, it is predicted, atomic bombs will be cheap and easy to make, so that a nation with the industrial capacity could produce them by the thousands. One atomic bomb attack, it was testified at a Senate hearing, could destroy overnight 40,000,000 of our population.

Two more atomic bombs were exploded over a target array of nearly a hundred naval vessels of all types at Bikini Lagoon in the Marshall Islands in what was known as Operation Crossroads. The first, known as Test Able, was dropped from a B-29 on June 30, 1946, while the second, known as Test Baker, was exploded under water, at an unrevealed depth, on July 24, 1946. The first test sank five ships and did serious damage to the superstructure of many more vessels placed at various distances from the explosion. The second raised a gigantic column of 10,000,000 tons of water, sank two battleships and one aircraft carrier (the *Arkansas*, *Nagato*, and *Saratoga*), and several smaller vessels; also, as was expected, it did major damage to the hulls of many more ships. The tests were so conclusive that a deep under-water test, scheduled for 1947, was called off as unnecessary.

The tests revealed that the atomic bomb has revolutionized naval warfare as it did land warfare. They showed that radical changes were necessary both in the design of ships and in naval tactics. Ships in a harbor would be particularly vulnerable. Amphibious warfare, such as in the last war, would become suicidal against an enemy possessing atomic bombs. The radiations alone from several atomic bombs, dropped low, or exploded under water, would be enough to destroy an armada such as landed on the Normandy beachhead.

Even before the bomb was used it was realized by those in the know that some method of international control would have to be worked out if civilization was to be protected against possible annihilation. After meetings at Washington and at Moscow it was agreed to create an Atomic Energy Commission under the auspices of the United Nations. In April, 1946, the now famous report by the board of consultants of the Secretary of State, of which David E. Lilienthal was chairman, was made public. This report was later adopted in principle, with some additions, as the official policy of the United States, and was formally presented as such by Bernard M. Baruch, United States Representative on the Atomic Energy Commission, before the commission's first formal meeting on June 14, 1946. At about the same time a bill providing for domestic control of atomic energy, placing control in the hands of a five-member civilian authority to be appointed by the President, was passed by Congress and signed by President Truman who appointed Mr. Lilienthal as chairman.

The United States plan makes the distinction between "dangerous" activities, such as the production of fissionable material that can be used for atomic bombs, and "safe" activities, namely, the development and use of atomic energy for peaceful purposes. This distinction is fortunately possible because of the two different processes involved. To produce atomic bombs it is necessary to have concentrated uranium 235, plutonium, or uranium 233 (made from thorium). To produce atomic power for industrial, medicinal, or other peacetime uses, diluted, or "denatured" material could be used. In this connection it must be remembered that whereas a nuclear explosion involves an uncontrolled chain reaction with fast neutrons, traveling at thousands of miles per second, the pro-

duction of atomic power for peacetime uses involves a controlled chain reaction with slowed down neutrons, traveling at only one mile per second.

The plan therefore calls for the creation of an Atomic Development Authority by the United Nations which would have complete control over all the activities pertaining to the production of dangerous materials. This, of course, means control of all uranium and thorium mines anywhere in the world, as well as control of the plants producing fissionable materials in pure form. These materials, when produced by the ADA, would then be "denatured," that is, diluted with isotopes, to such an extent that they could no longer be used for atomic explosives but could still be very useful for beneficial purposes, such as the production of atomic power, new elements for industry and medicine, research, etc. These "denatured" materials the ADA would distribute to authorized users among the nations of the world.

To make certain that no unauthorized uses are made of the "denatured" materials a system of rigid international inspection is called for and swift sure punishment for violators. To provide sure and swift punishment for violators, Mr. Baruch added the stipulation that as far as the subject of atomic weapons is concerned there must be no veto to obstruct swift and effective action.

The Soviet delegate, Mr. Andrei A. Gromyko, described the plan as unacceptable. He proposed instead a treaty to outlaw atomic bombs, destruction of all atomic bombs within three months after the signing of the treaty, with each nation to supervise its own system of controls and punishment for violators.

The advent of atomic power promises to open a new era. It will not be possible to use a power pill to drive cars or planes because amounts less than what is known as "critical mass" cannot be used and because massive shielding is required as a guard against radiation.

On the other hand it will be possible to build large power plants for generating enormous quantities of power in cities as well as in ships. It could be used to irrigate wastelands where neither coal, oil or water power is available and turn deserts into blooming gardens. It could be used to air-condition the tropics and make sub-Arctic lands habitable.

Power is the least of the promises of atomic energy. It holds greater promise as a key to the mysteries in nature. With it man can create elements at will for use in industry and medicine. Ordinary elements can be made radioactive and used effectively in cancer treatment. Already radioactive iodine is being used to treat cancer of the thyroid.

Certain elements can be used as "tracers," or "tagged atoms" for probing some of the mysteries of nature. With atomic energy, for example, we can make a new type of carbon, of atomic weight 14 instead of 12 which, since it is distinguishable from ordinary carbon, permits tracing of its course in the living body of plant, animal and man. We may find out why and how we get cancer, for example, and the means to prevent it and cure it. We may find out why we grow old and how to postpone the coming of old age. We may learn why chlorophyll, the substance that makes grass green, is the only agent in nature that knows the secret of harnessing energy from the sun for the creating of the food on which we live. It is this ability to store solar energy that gives us the coal and oil we use for energy. Since chlorophyll has carbon atoms in its make-up, carbon 14 may help us to learn how to create food from simple substances, as a plant does, and how to harness solar energy.

With atomic energy man at last has a fuel with enough power to lift him beyond the region where the earth's gravity can pull him back. He thus at last has a fuel for a space ship to carry him to the moon and the planets. This is not to say that the interplanetary era is "just around the corner," but its faint shadow is already discernible.

Man stands at the gateway of a new world provided he does not commit suicide in the meantime.

THE PHYSICAL SCIENCES

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BERNARD JAFFE

author of *Men of Science in America*, *Crucibles*, *Outposts of Science*

ON JANUARY 10, 1946, men made contact with the moon for the first time in history. Army scientists at Belmar, N. J., shot a beam of high-frequency radio pulses through the hitherto impenetrable ionosphere. The radar waves struck the moon and bounced back to the earth. A series of jagged, saw-toothed lines on an oscilloscope showed that the round trip of about 477,000 miles had taken 2.4 seconds, exactly as calculated. Predictions soon followed the startling news. Men would map the moon, contact planets, and prepare for interplanetary communication.

Fundamental research during 1946 in fields other than electronics and atomic energy was less fruitful because many men had turned to these exciting fields. Besides, most of the key European centers of research, crippled during the war, had just revived.

Astronomy

Least affected by the war were the astronomers, most of whom never left their telescopes. Two new comets were reported. A scientist in New Zealand and a Washington, D. C., businessman found them in the constellations of Puppis and Cygnus. Yerkes Observatory announced a new explosion of the star or nova, T. Coronae Borealis, and the University of Arizona added six more superheavyweight stars (hundreds of times denser than steel) to the eighteen already known. Mt. Wilson Observatory presented final proof that the sunspot cycle was completed in 22 years rather than in eleven. The *Dreamboat*, flying nonstop from Honolulu to Cairo across the Arctic, confirmed that the north magnetic pole was 200 miles nearer to the geographic pole. Harvard's Dr. Bok proclaimed the universe not much older than the earth—a mere 3 billion instead of 5 billion years. And even a new astronomical landmark was rising on Mt. Palomar in California with the completion of the 200-inch telescope, another landmark in astronomy was being abandoned. For the 271-year-old Royal Greenwich Observatory was transferred from London to Sussex, 15 miles east of the prime meridian. The world, however, will still fix its time to *Greenwich* mean time.

Physics

In the desert area of White Sands, New Mexico, 14-ton German V2 rockets were sent flaming into the air, their warheads filled with instruments for gathering data on mesotrons. These little-understood particles thrown out of the hearts of atoms by cosmic rays hold many of the secrets of the atom's nucleus. Attaining speeds of 3600 miles per hour the rockets reached altitudes as high as 105 miles. Mesotrons were also tracked by M. I. T. scientists who went aloft in B-29s. But these studies were limited. They depended upon the capture of a few mesotrons produced by cosmic rays coming from interstellar space.

A much more effective method for the study of mesotrons was made possible by the building of the first *synchrotron*, the most important single development of the year in atomic research. The synchrotron is a cyclotron to which the principle of frequency modulation used in radio transmission is applied to increase its power. The new feature was first suggested by a Soviet scientist, V. Veksler, and independently introduced by Edwin M. McMillan in the laboratory of Ernest O. Lawrence, inventor of the cyclotron. It was first applied to Lawrence's 37-inch cyclotron, and will be applied later to the huge 184-inch cyclotron now nearing completion. It is expected that particles will be accelerated in this machine to energies equivalent to 400,000,000 electron volts, powerful enough to produce mesotrons for laboratory study.

Another new type of atom-smasher called a *linear accelerator* was constructed by Luis W. Alvarez. This 40-ft.-long experimental model is capable of supplying energies of 40,000,000 electron volts. The machine can be increased in size to 1000 feet or more to furnish energies equivalent to a billion electron volts which supply streams of mesotrons.

In RCA laboratories the magnification of the electron microscope was doubled to 200,000 diameters, a magnification which would blow up the thickness of a postage stamp to the height of a twenty-story building.

A new standard of measurement was suggested. Instead of the red cadmium line adopted in 1893, it was proposed to use the green line of the unstable mercury isotope 198 prepared by the modern alchemy of bombarding gold with neutrons. The new line is 10 times finer, possible measurements as tiny as one billionth of a centimeter.

Chemistry

On August 2 the first allotment of a by-product of the atomic pile for peacetime use was made at Oak Ridge, Tennessee. On this historic occasion five tiny bits of radioactive Carbon 14 were distributed among Nobel prizeman James Franck of the University of Chicago, and research workers at the Barnard Free Skin and Cancer Hospital of St. Louis, the University of Minnesota and the Medical Schools of the Universities of Pennsylvania and California. Cyclotrons also made available additional quantities of artificially radioactive isotopes including sodium, potassium, phosphorus and iron which were used as tracer elements in the further study of photosynthesis, gangrene, cancer, diabetes and blood, muscle, liver and brain.

Synthetic chemistry continued to add to its tens of thousands of new creations. Cane sugar was prepared synthetically for the first time by chemists who also synthesized two sugars never before known. New derivatives of streptomycin, penicillin and DDT were born in the chemists' test tube. Dr. Vincent du Vigneaud and his associates at Cornell synthesized penicillin. *Aralen*, a new substitute for quinine, developed with the aid of human guinea pigs, was made available to the public for the first time. A new "palatability" vitamin, Nutrient X, found in milk, eggs, liver and beef, came out of the laboratories of our Department of Agriculture to be added to the 16 vitamins already recognized. The 25-year-old search for the chemically pure growth hormone ended when Chio H. Li, working with several associates in the laboratory of Herbert M. Evans, prepared it from the anterior lobes of the pituitary glands of cattle. Rats, injected with this hormone, grew to giant size. The credulous even talked of a race of giant men springing up at the prick of a hypodermic.

After several weeks of uncertainty the two man-made elements Nos. 95 and 96 were named *Americium* and *Curium* by their codiscoverer, Glenn T. Seaborg. The synthesis of elements 43, 61, 85 and 87 formerly known as masurium, illinium, alabamine and virginium was also reported, bringing the number of chemical elements discovered and named by Americans to seven.

Technology and Engineering

The most important advance in technology and engineering was the first study of power production from a high temperature atomic pile undertaken at Oak Ridge. Other progress centered around further developments in the peacetime role of electronics including radar, another lusty child of the war, and jet and rocket propulsion. *Loran*, a radio location network, was greatly extended to enable ships and planes to determine their positions quickly and accurately. *Shoran*, another wartime device began charting the earth's surface. Further use of radar to prevent collisions at sea was reported. The *S. S. City of Richmond* on Chesapeake Bay was equipped with radar designed to show obstacles through fog and blackness within a range between 100 yards and 32 miles. A new attack on the problem of weather forecasting was resumed when the U. S. Weather Bureau extended the use of this radar weapon. Flying daily from Florida, Newfoundland, the Azores and California, special radar-equipped planes watch their scopes for approaching storms and other weather conditions over the ocean within 200 miles.

To increase the range of television broadcasts, General Electric and Westinghouse engineers took to the air in planes and blimps. Flying as high as 6 miles they hope to increase the present range of 50 miles to 200. Latest developments in television and air navigation were combined in a single system known as *teleran* which was given its first public test at Indianapolis. This system enables a pilot to watch a screen in front of him showing storms ahead, land obstacles, and other planes in flight, and guides him to a safe landing even in total darkness.

New turbo-jet engines powered the XP-84 *Thunderbolt* which flew at 611 miles per hour. The Navy tested a new 210-lb. rocket motor for supersonic planes. This motor is fueled with alcohol and liquid oxygen, like the V2, and generates power equivalent to that of all the engines of a B-29. New British and American planes powered by jet and rocket engines were built to fly at speeds greater than that of sound. One of these supersonic planes tested was the Army-Bell XS-1. To help in these developments the largest and most modern wind tunnel was opened at Moffett Field, California. It is capable of producing wind up to 1500 miles per hour, or twice the velocity of sound at sea level.

Supersonics for dispelling fog over air fields was successfully tested at Arcata, California. Inaudible sound wave vibrations of 20,000 to 40,000 cycles per second were used in these tests. A magnetic detector first used against submarines was developed and successfully used on planes for rapid and accurate prospecting of oil deposits lying under the American continental shelf recently placed under Federal jurisdiction.

Cooperation Among Scientists

Cooperation among world scientists was resumed. The International Astronomical Union convened again in Copenhagen. Representatives of 13 nations including the United States, Great Britain and the U. S. S. R. recommended the creation of an international astronomical observatory under the U. N. O. A bill for the creation of a powerful National Science Foundation was passed by our Senate. The social awareness of men of science as illustrated by the activities of the Federation of American Scientists was more widespread. And 1946 took time out to celebrate two important centennials—the first public demonstration of the use of ether in surgery, and the establishment of the Smithsonian Institution.



CONSIDERATIONS • 1946

by

CHRISTOPHER MORLEY

author of *Thunder on the Left*, *Kitty Foyle*, etc.

LITERATURE is a social phenomenon, especially in a country so quick on the intercom as U. S. A. Here and now it cannot be intelligibly discussed without some suggestion of its civilian background. Even if a book were withdrawn on publication day, it has already been read by dozens or hundreds of communicative people: typists, editors, printers, reviewers, even a few ambitious and inquisitive booksellers. Even if never technically published, it might have more eventual influence than many smart sellers. The first point to suggest is that 1946 is unusual for the great books that were not published. They may have been written or in course of writing, but they don't seem to have got into public print.

Paper wasn't the only shortage.

The American muse, of strong and diverse heart, as Steve Benét said, was in 1946 drinking gin and eating horsemeat; uttering hyperthyroids of pain, or else climbing backward and upward for anesthetic in Henry James and Sherlock Holmes and Alice-in-

*The publisher and the reader of this almanac are asked to remember that this is a personal memorandum. It is not a complete or official summary. It is based on a list of U. S. book publications, January to September 1946, supplied by the Saturday Review of Literature. It is individual testimony, as impromptu as sincere, bearing only upon what I myself had time to read. *Caveat lector.*

Wonderland.† For the first time in a number of years, the current product in books was so obviously second-rate that older classics were rediscovered and reprinted in good supply. For instance, those two not altogether dissimilar prophets, Walt Whitman and archy the roach. Probably our greatest loss, in one vein, was that archy could not be here to comment on the Truman-Wallace episode. By the way, it required the social spasms of Europe in 1848 to start Walt Whitman thinking. Perhaps by 1948 someone else may have been startled into a fresh and new imagination of the world—The Mother with her Equal Brood. I give us until 1948, but not much longer, to find it.

Literature is a stream and not a series of parcels. It can't be chopped off into annual trial balances. Ink is hypersensitive stuff; it quickly shows the stains of fatigue, confusion and bile. Throughout these months we have suffered the universal cat-fever of melancholia and dismay. As at Vienna in 1815, or in London in 1919, everyone danced. The popularity of ballet is always diagnostic. To repeat an old social apothegm (my own), after Talleyrand comes Sally Rand. Another form of social *Angst*‡ was the emphasis laid upon the modes and manners of teen-agers. It was as if mortal conscience knew these kids might not have long. Give them a whirl while possible.

Under these conditions literature behaved as any analyst would expect. There was more jeebie than Hebe.§ The human mind was in exactly that tizzy familiar to us all: when you know you have just laid something down but can't find it. I had it in my hand a moment ago, where did I put it? Peace was like that. For a few weeks we had it and somehow it got mislaid. The usual human instinct in such episodes is to blame someone. We have been trying to satisfy ourselves by blaming Russia. But needling Russia is like needling a haystack. The oecumenical familiar phrase of the year was "coming apart at the seams."

All this clumsy, but I hope intuitive, comment is relevant to literature. One of the most deeply interesting pieces I read in 1946 was by Professor Ralph W. Gerard, neuro-physiologist at the University of Chicago. *The Scientific Monthly* (June, 1946) reprinted his lecture on "The Biological Bases of Imagination." He pointed out, what was flashing-new to me, that the word "consider" literally means to see the stars in groups or patterns and not as random sprinkles of light. So for my own consolation I am trying to find some design for stargazing. Why was it, for instance, that in 1946 Shakespeare was suddenly recognized as the greatest scenarist for moving-pictures that ever lived? This could only be because many of those actually drawing salary were so appalling? Why is it that "The Tempest," the greatest political fable ever written, is getting ready to be re-revived? There is hardly a stick of type in it that does not dance on a White House desk. Miranda might be speaking for Joe Stalin after Bikini:

"Still it is beating in my mind, your reason
For raising this sea storm?"

When politics goes astray, it is because its practitioners never took the arts seriously.

Nineteen Forty-six was a busy and, I believe, a prosperous year in the Book Trade. It was a reasonable phenomenon that the top merchandise package was the simple jocose relief of "The Egg and I," where no one got shirred except a husband. But few American works of imagination in 1946 are likely to be recognized or remembered, say, two years hence. There is a possible exception, Christopher LaFarge's under-emphasized portrait of the old New England shrew in two hurricanes ("The Sudden Guest"). As well as I remember, LaFarge never labored the idea that these local cyclones might symbolize the two great mortal storms of our time. Consequently, his

†It was no coincidence but pure symptom of instinctive need that 1946 began with Brooke Cadwallader's Tenniel scarf and ended with the beautiful two Alice volumes as Book-of-the-Month Club dividend. The student of literary moeurs can often get cross-bearings on the intellectual taste of a period by watching what people wear. Mr. Wakeman in "The Hucksters" did an excellent job on hand-painted neckties as a symbol. Any analyst of international affairs may well have been anxious in seeing the present haberdashery of high officers in Washington.

‡Cyril Connolly's phrase. I wish Connolly were an American so I could pay him tribute. To my completely private taste, his "The Unquiet Grave" was one of the most significant books of the year. Significance came through, as it rarely does in an American writer, completely without shame.

§Footnote for *Information Please*: Hebe, the sommelière of the gods.

story—though he fractured the spell by an interpolated narrative—acquired the coefficient of expansion of true art. In dealing with true art, the more we think about it the stronger it is for us, and we for it. "All the King's Men" by Penn Warren was a novel of fine conscience and power, but rather dense reading.

Storm of all kinds is the only consideration I can figure. Like Alcoholics Anonymous, Mental Castaways Anonymous were blown to and fro. The year began hung over in the psychosis of "The Lost Weekend," which had just been done (brilliantly, they tell me) in the movies. Its author was finishing another remarkable clinical study in which more than a Weekend was lost; indeed, the Hormone itself. There followed the erotic storm of "Hecate County," the cerebral storm of "The Snake Pit," the account executive storm of "The Hucksters." Then there was Mr. Saroyan's typhoon of beatitudes, Mr. Bromfield's parching wind of agronomy, and a notably entertaining theosophist typhoon in the biography of Madame Blavatsky (an uproariously comic book).

Speaking of storms, perhaps the best barograph was a book both written and published without the least overt intellectual pretension, Mr. Gresham's "Nightmare Alley." The introductory quotes from T. S. Eliot and Petronius are not pretension but a windshield. In this biography of a carnival fakir he shows us a snake pit with real snakes. His greatest achievement is the sordid or obscene accident in boyhood which becomes a "compulsion" and explains his hero's switchback career. This is a book for the obstinately charitable, but it has moments that raise horror to Rabelaisian belly-laugh. As much as anything in the book, I admired the publisher's blurb; it told me: "written with casual and contemptuous dispassion." This, together with "The Sudden Guest," is my private nomination as a book that might, however painfully, be remembered.

Beside these strong brews, the sober narrative virtues or critical surveys had slow going. Some of the best writing, as is natural, dealt with the unalterable sea. Mr. McFee's "In the First Watch," for instance, a book of deeply brooded fidelity to an ancient tough tradition, pawky in humor sometimes too stinging for the landsman. Captain Karig's "Battle Report," and Sheean's "This House Against This House," and Dos Passos' "Tour of Duty," and John Mason Brown's mellifluous "Seeing Things," and Greenslet's "The Lowells," and Justice Jackson's "Case Against the Nazi War Criminals" were, among others, books that had in various ways survived what Lewis Mumford calls "the ordeal of reality." Taking a skywide view, it might be that some of the last pieces of Ernie Pyle were as important as more meditated things.

A book Ernie Pyle would have loved and whose inside attitude is much the same, is "Mr. Roberts," by Thomas Heggen. It is a frank, humane, and gorgeously humorous study of the hypertensions among a ship's crew at sea. The *Reluctant* was a Navy cargo ship on rackingly tedious duty among South Pacific islands. I don't believe the peculiar gripes of enforced celibacy have ever been so blithely and so touchingly laid bare. Bare is the right word; what an interesting evidence of our shifting ethics that these brilliantly carnal-spiritual sketches could have been first printed in the *Atlantic*. This book should be required reading at Annapolis, and I would love to see it reviewed by some brass hats of the Royal Navy. In a delightful way, "Mr. Roberts" makes a perfect companion for Mr. McFee's story of cargo vessels of an earlier era. What the sea does to men does not change, and both these books have (Mr. Heggen will understand) the birthmark.

The year comes toward its close with the reprint in book form of John Hersey's nobly detached, matter-of-agony report on Hiroshima. But as far as creative imagination goes (and it can go a long way) the published work of the Americans in the past year has been disappointing. It has been mostly in what my Japanese friend Mrs. Sugimoto calls "the ashen district." No wonder; and its marks of pain and doubt are probably wholesome. If our belles-lettres of 1946 had been a Grecian urn of fair attitudes we would truly have cause for despair. Any number of symbolic anecdotes might be offered, but I think the one that amused me most was Harry Hansen's account of the suitcase that turned up at Scribner's. It bore the name and Cuban despatch tag of Mr. Hemingway. There was jubilee in the editorial office. Here at last, they exclaimed, must be something

really good, Hemingway's new novel. The bag was locked but publishers have passkeys to everything. They prised it open and found two old pairs of fishing pants.

But somehow 1946 was the kind of year when in happy secrecy something fine might well be under way. Professor Gerard quotes Professor Lowes: "Out of chaos the imagination frames a thing of beauty." Chaos we had more universal than ever before. When toxins are so strong, antibodies are probably at work.

So, for 1947, Imagination Please.

BOOK CLUB SELECTIONS

Source: *The Saturday Review of Literature.*

BOOK-OF-THE-MONTH CLUB, INC.

Date	Selection	Author	Publisher	Publisher's price
1945				
Sept.	The White Tower	James R. Ullman	J. P. Lippincott Co.	\$2.75
Oct.	Cass Timberlane	Sinclair Lewis	Random House, Inc.	2.75
Nov.	Days and Nights	Konstantine Simonov	Simon & Schuster, Inc.	2.50
Dec.	Lovely Is The Lee and Beach Red	Robert Gibbings Peter Bowman	E. P. Dutton & Co. Random House, Inc.	3.00 2.50
1946				
Jan.	Brideshead Revisited	Evelyn Waugh	Little, Brown & Co.	2.50
Feb.	Arch Of Triumph	Erich M. Remarque	D. Appleton-Century Co., Inc.	2.75
Mar.	The Autobiography of William Allen White		The Macmillan Co.	3.00
Apr.	The Snake Pit	Mary Jane Ward	Random House, Inc.	2.50
	Man-Eaters of Kumaon	Jim Corbett	Oxford Univ. Press	2.00
May	My Three Years With Eisenhower	Capt. Harry C. Butcher, USNR	Simon & Schuster, Inc.	3.00
June	The Hucksters	Frederic Wakeman	Rinehart & Co., Inc.	2.50
July	Britannia Mews	Margery Sharp	Little, Brown & Co.	2.75
Aug.	Independent People	Halldor Laxness	Alfred A. Knopf, Inc.	2.95
Sept.	The Sudden Guest	Christopher La Farge	Coward-McCann Inc.	3.00
	Animal Farm	George Orwell	Harcourt, Brace & Co., Inc.	2.00
Oct.	Miss Mrs Masham's Repose	T. H. White	G. P. Putnam's Sons	2.75
Nov.	Thunder Out Of China	Theodore H. White & Annalee Jacoby	Wm. Sloane Associates, Inc.	3.00
Dec.	Balzac	Stefan Zweig	The Viking Press, Inc.	3.25

LITERARY GUILD

1945				
Sept.	The Black Rose	Thomas B. Costain	Doubleday Doran & Co., Inc.	\$3.00
Oct.	Three O'Clock Dinner	Josephine Pinckney	Viking Press	2.50
Nov.	The Gauntlet	James Street	Doubleday Doran & Co., Inc.	2.75
Dec.	Beside Book of Famous French Stories	Edited by Belle Becker & Robert N. Linscott	Random House, Inc.	3.00
1946				
Jan.	The King's General	Daphne du Maurier	Doubleday & Company, Inc.	2.75
Feb.	Those Other People	Mary K. O'Donnell	Houghton Mifflin Co.	2.50
Mar.	David, the King	Gladys Schmitt	Dial Press	3.00
Apr.	Wake of the Red Witch	Garland Roark	Little, Brown & Co.	2.75
May	This Side of Innocence	Taylor Caldwell	Charles Scribner's Sons	3.00
June	Then and Now	Somerset Maugham	Doubleday & Company, Inc.	2.50
July	Singing Waters	Ann Bridge	Macmillan Co.	2.75
Aug.	The American	Howard Fast	Duell, Sloan & Pearce	3.00
Sept.	The Dark Wood	Christine Weston	Charles Scribner's Sons	2.75
Oct.	Lord Hornblower	C. S. Forester	Little, Brown & Co.	2.50
Nov.	B. F.'s Daughter	John P. Marquand	Little, Brown & Co.	2.75
Dec.	Pavillon of Women	Pearl Buck	John Day	3.00

BOOK FIND CLUB

Date	Selection	Author	Publisher	Publisher's price
1945				
Sept.	The Plot Against the Peace	Michael Sayers & Albert Kahn	Dial Press	\$2.75
Oct.	Keep Your Head Down	Walter Bernstein	Viking Press	2.00
Nov.	These Are the Russians	Richard Lauterbach	Harper	3.00
Dec.	The Folded Leaf	William Maxwell	Harper	2.50
	Dark Legend	Frederick Wertham	Duell, Sloan & Pearce	2.75
1946				
Jan.	Cross Section—1945	Edwin Seaver (Editor)	L. B. Fischer Co.	3.50
Feb.	Focus	Arthur Miller	Reynal & Hitchcock	2.50
Mar.	North Star Country	Meridel La Sueur	Duell, Sloan & Pearce	3.00
Apr.	The Bulwark	Theodore Dreiser	Doubleday & Company, Inc.	2.75
May	The Age of Jackson	A. M. Schlesinger, Jr.	Little, Brown & Co.	5.00
June	Wasteland	Jo Sinclair	Harper	2.50
July	Wind in the Olive Trees	Abel Plenn	Boni & Gaer	3.00
Aug.	Earth Can Be Fair	Pierre Van Paassen	Dial Press	3.75
Sept.	A World to Win	Upton Sinclair	Viking Press	3.00
Oct.	The American	Howard Fast	Duell, Sloan & Pearce	3.00

ANISFIELD-WOLF AWARDS

The Anisfield-Wolf Awards for the best books on race relations were established in 1935, and the first award was made in 1936. They are derived from a fund provided by Edith A. Wolf of Cleveland in memory of her father, John Anisfield, and her husband, Eugene E. Wolf. The original award was for \$1000, but beginning with 1942 the amount was doubled, and since that time it has been doubled annually between two books. Selections are under sponsorship of The Saturday Review of Literature.

- 1936—"Negro Politicians"—By Harold F. Gosnell
 1937—"We Europeans: A Survey of Racial Problems"—By Julian S. Huxley and A. C. Haddon
 1938—"We Americans"—Elin L. Anderson
 1939—"The Negro College Graduate"—By Charles S. Johnson

- 1940—"Negro Family in the United States"—By E. Franklin Frazier
 1941—"From Many Lands"—By Louis Adamic
 1942—"Quest"—By Leopold Infeld
 "The Haitian People"—By James G. Legburne
 1943—"Dust Tracks on A Road"—By Zora Neale Hurston. "Negroes in Brazil"—By Donald Pierson
 1944—"The World of Sholom Aleichem"—By Maurice Samuel. "New World A-Coming"—By Roi Ottley
 1945—"Earth and High Heaven"—By Gwethalyn Graham. "An American Dilemma"—By Gunnar Myrdal
 1946—"One Nation"—By Wallace Stegner and the Editors of *Look*
 "Black Metropolis"—By St. Clair Drake and Horace R. Cayton

RARE BOOKS AT AUCTION

Prices at 1945-46 auctions:

- LEWIS CARROLL'S original manuscript of "Alice's Adventures Under Ground," which he later expanded into "Alice's Adventures in Wonderland" \$50,000
 FIRST FOLIO SHAKESPEARE, London, 1623 (the Manley-Earl of Rosebery-Hogan copy) \$50,000
 "ALICE'S ADVENTURES in Wonderland," London, 1865 (corrected sheets of suppressed first edition, with ten original drawings by John Tenniel) \$23,000
 CHAUCER'S "Canterbury Tales," London, 1478 (first edition, printed by William Caxton, a defective copy) \$13,000
 BUNYAN'S "Pilgrim's Progress," London, 1668 (first edition) \$8,000

- "ALICE'S ADVENTURES in Wonderland," London, 1865 (presentation copy from the author) \$7,500
 MILTON'S "Paradise Lost," London, 1667 (first edition, first title page) ... \$6,500
 SPENSER'S "Faerie Queene," London, 1590 (first edition) \$6,000
 GRAY'S "Elegy Written in a Country Churchyard," London, 1751 (first edition) \$4,500
 THIRD FOLIO Shakespeare, London, 1685 \$4,500
 WALTON'S "Compleat Angler," London, 1653 (first edition) \$4,400
 HOLY BIBLE, Authorized (King James) Version, London, 1611 (first edition) \$4,000

THE THEATRE • 1945-46

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JOHN MASON BROWN

drama critic of the Saturday Review of Literature
and author of *Seeing Things, To All Hands, Many a Watchful Night*

NEW YORK DID NOT have America to thank for its most memorable evening in the theatre last year. That evening came late in the season, after months of waiting; indeed, as late as the twentieth of May. It was then that London's Old Vic Company, having won acceptance rather than created fervor by its productions of the two parts of *Henry IV* and *Uncle Vanya*, presented Sheridan's *The Critic* and *Oedipus* as a double bill.

It was then, too, especially in Yeats's version of the Sophoclean tragedy that Laurence Olivier proved himself to be more than a capable actor possessed of extraordinary versatility. His Theban king represented a great part, greatly comprehended and projected. The two terrible groans, which escaped from him as from a clubbed animal when at last he understood his guilt, were exceeded in their frenzy only by the bravos with which Mr. Olivier was cheered at the curtain's fall. In a Greek play, written nearly twenty-four hundred years ago and acted by a British company in the spirit of its original writing, the New York theatre of the first winter after World War II found not only its finest performance but its most authentic thrill.

Another Greek play, by the same author, provided Broadway with its most exalted reminder of what America had been spared during the recent struggle. This was the *Antigone*, that ageless tale of tyranny which, in Jean Anouilh's modern adaptation, had meant much to Parisians in the war years. Into the very ears of the Nazis it released a battle cry for liberty in an occupied Paris. The tragedy was thought cold and difficult by many here. On the whole, too, it was coldly received in spite of the admitted excellence of Katharine Cornell's *Antigone* and Cedric Hardwicke's *Creon*. But to those willing, and able, to forget the comfortable security of America and remember the recent agony of the Old World, it could claim both heat and grandeur. Not only as a commendable experiment in the theatre but as an experience, however vicarious, in the feelings of a conquered people.

The war's nearness cast its inescapable shadow over the entire season. It explained the continued absence of new, young talents, and the confusion with which older playwrights approached a world once again supposedly at peace. It also explained why revivals contributed to the season more than their usual quota of interest.

Maurice Evans, for example, recently out of the Army where he had played the Dane to troops in the Pacific, brought his G.I. *Hamlet* to Broadway. Once the champion of the uncut text, Mr. Evans now appeared in so truncated a version that Ophelia was left unburied and Yorick unremembered. But, regardless of what subtleties were lacking in it, a jeep dashing up a mountain could not have moved in a livelier fashion than this production did as a melodrama, when it sped from climax to climax. Mr. Evans's extrovert prince made clear again a welcome fact. He is an actor who is not afraid of acting. Furthermore, he is able to do full justice to the beauties of Shakespeare's verse.

Another revival was equally successful. It was Shaw's *Pygmalion* as done by Theatre Incorporated, that promising new producing group which sponsored the Old Vic's season. Gertrude Lawrence was the evening's Eliza Doolittle, and a highly satisfactory one. There were, of course, other revivals. Miss Cornell was seen briefly in *Candida*. The Theatre Guild staged a pedestrian *Winter's Tale*. Miss LeGallienne appeared in Thomas Job's adaptation of *Thérèse*, Zola's guignol which long ago had scandalized New York but which now seemed very tame compared to Mr. Job's own *Uncle Harry*. Such old musicals as *The Red Mill* and *Show Boat* won huge audiences. And Bobby Clark scraped, ogled, grunted, and capered as Monsieur Jourdain in a slapstick version of *The Would-Be Gen-*

tleman which, though it might have baffled Molière, delighted Mr. Clark's large and ardent circle of fans.

The test of a theatre's health does not lie in its revivals. They can be fine indications of its skill. But, before a theatre can be said to be really alive, new playwrights must be heard from, speaking for their own day. It was precisely here that the season, though entertaining, was at its weakest. Managers appeared to be frightened away, for example, from war scripts. Rightly or wrongly, they thought the public had had enough. Even so, among the year's most interesting offerings were several which did not turn their backs on the war. One of these was Harry Brown's *A Sound of Hunting*, about a group of G.I.'s at Cassino. Although the drama was marred by the inclusion of a woefully overdrawn correspondent, there were those who were convinced that its dialogue was the best soldier talk to have been heard hereabouts behind the footlights since *What Price Glory?*

Another war play was *Home of the Brave*. It was a poignant psychiatric case history by Arthur Laurents. It also sought to deal with anti-Semitism, and was hurt rather than helped by having taken aim at two targets instead of one. Irwin Shaw's *The Assassin* dealt with the Darlan affair. To those who had neither been in North Africa nor followed the case closely it seemed incredible. Which was a pity. Because, in spite of its faults, it merited a longer run than it achieved. Significantly enough, the production dealing with the war which was most enthusiastically received was *Call Me Mister*, a fast-moving and hilarious revue about separatees. It was staged and presented by a group of talented young people who were themselves just discharged from the services. It offered an uproarious, sometimes sobering, journey on the "Going Home Train."

Although escape seemed to be Broadway's contribution to reconversion, the theatre did dare to face certain problems, some topical, others of long and ugly standing. Four times—in a dramatization of *Strange Fruit*, in *Jeb*, in *On Whitman Avenue*, and in *Deep Are the Roots*—it endeavored to grapple with the race problem. Well-intentioned as these attempts were, most of them were inept. Indeed, of the four only Arnaud d'Usseau's and James Gow's *Deep Are the Roots* succeeded dramatically. It may have been unblushingly melodramatic as it recounted the indignities and horrors to which a gallant Negro lieutenant was subjected when he returned to his home in the far South. But it could claim this virtue. Both as written and as acted it riveted the attention of an audience.

Two comedies concerned themselves convulsingly with American politics. One of these was Garson Kanin's *Born Yesterday*; the other Howard Lindsay's and Russel Crouse's *State of the Union*. Both were slick and canny products of our showshops. And both, beneath their gagging, made serious pleas for the need of idealists in our political life. It was to *State of the Union* that the Pulitzer judges gave their prize. Although both of these comedies won votes from some of the drama critics, the Critics Circle gave no award. In their group opinion the season was not prize-worthy. They contented themselves with conferring a citation upon *Carousel* as the year's outstanding musical play.

Needless to say, there were successes. The Lunts rightly scored one of the most glittering triumphs of their triumphant careers because of the perfection of their joint playing in Terence Rattigan's *O Mistress Mine*. Louis Calhern and Dorothy Gish were widely applauded for their performances as Justice and Mrs. Holmes in Emmet Lavery's heart-warming biographical play, *The Magnificent Yankee*. In *Dream Girl* Elmer Rice pleased many playgoers by providing for his wife, Betty Field, more parts than most monologists play in their entire lives. And in *Lute Song*, a Broadway version of a venerable Chinese classic, those who rejoice in spectacles (and even those who don't) could not fail to be impressed by the beauty of Robert Edmond Jones's settings and costumes.

In the realm of musicals, the calliopic Ethel Merman swept everything and everyone before her as Annie Oakley in *Annie Get Your Gun*. Among the other contestants in this field *The Day Before Spring* achieved a comfortable run. So did *Are You With It?*, *Three to Make Ready* with Ray Bolger, and *Billion Dollar Baby*. Four musical comedies, however, scored the most resounding flops, each to the reputed tune of over \$200,000.

Business was good, if art on the whole was indifferent. The season was unlucky for

such of the older playwrights as Robert E. Sherwood, S. N. Behrman, George Kelly, and Maxwell Anderson. Mr. Anderson's *Truckline Cafe*, however, cannot be set down as a complete failure inasmuch as the reviews it received provoked Mr. Anderson into describing the critics as members of the "Jukes family of journalism"—a phrase that threatens to be adhesive.

Hopes are already high for the next season. Eugene O'Neill has broken his thirteen-year silence with *The Iceman Cometh*. Most of the older dramatists have new plays in which they believe. At least two repertory organizations are being formed. And thousands of young people are back from the war. The optimists pin their faith on them, remembering how, after World War I, the American theatre flowered.

The New York Theatrical Season

Play	Date opened	Per- form- ances	Play	Date opened	Per- form- ances
FROM OTHER SEASONS					
Life with Father	Nov. 8, 1939	2,903*	Call Me Mister (MR)	Apr. 18, 1946	210*
Oklahoma! (M)	Mar. 31, 1943	1,527*	This, Too, Shall Pass	Apr. 30, 1946	63
The Voice of the Turtle	Dec. 5, 1943	1,047*	On Whittman Avenue	May 8, 1946	148
Anna Lucasta	Aug. 30, 1944	901*	Swan Song	May 15, 1946	155
Harvey	Nov. 1, 1944	812*	Annie Get Your Gun (M)	May 16, 1946	174*
Carousel (M)	Apr. 19, 1945	623*	Around the World (MR)	May 31, 1946	75
			Second Best Bed	June 3, 1946	8
			The Dancer	June 6, 1946	5
			Tidbits of 1946	July 8, 1946	8
			Maid in the Ozarks	July 15, 1946	102
1945-1946			OPENINGS—SEPT. 1 TO OCT. 15, 1946		
Mr. Strauss Goes to Boston (M)	Sept. 6, 1945	12	The Front Page (R)	Sept. 4, 1946	*
A Boy Who Lived Twice	Sept. 11, 1945	15	Yours Is My Heart (M)	Sept. 5, 1946	36
Devils Galore	Sept. 12, 1945	5	A Flag Is Born	Sept. 5, 1946	*
Make Yourself at Home	Sept. 13, 1945	4	Gypsy Lady (M)	Sept. 17, 1946	*
The Ryan Girl	Sept. 24, 1945	48	Hidden Horizon	Sept. 19, 1946	12
You Touched Me	Sept. 25, 1945	109	The Bees and the Flowers	Sept. 27, 1946	*
Deep Are the Roots	Sept. 26, 1945	440*	Obsession	Sept. 27, 1946	*
Carib Song (M)	Sept. 27, 1945	36	Hear That Trumpet	Oct. 1, 1946	*
Live Life Again	Sept. 28, 1945	2	Cyrano de Bergerac	Oct. 8, 1946	*
Polonaise (M)	Oct. 6, 1945	113	The Iceman Cometh	Oct. 9, 1946	*
The Red Mill (R)	Oct. 16, 1945	336*	Mr. Peebles and Mr. Hooker	Oct. 10, 1946	4
The Assassin	Oct. 17, 1945	13	The Duchess of Malfi	Oct. 14, 1946	*
Beggars Are Coming to Town	Oct. 27, 1945	25	Lady Windermere's Fan	Oct. 15, 1946	*
The Next Half Hour	Oct. 29, 1945	8			
The Secret Room	Nov. 7, 1945	21			
The Girl from Nantucket (M)	Nov. 8, 1945	12			
The Rich Full Life	Nov. 9, 1945	27			
Are You With It	Nov. 10, 1945	264			
The Rugged Path	Nov. 10, 1945	81			
Skydriit	Nov. 13, 1945	7			
State of the Union	Nov. 14, 1945	384*			
A Sound of Hunting	Nov. 20, 1945	23			
Marriage Is for Single People	Nov. 21, 1945	6			
The Day Before Spring (M)	Nov. 22, 1945	167			
The Mermaids Sing	Nov. 28, 1945	53			
Strange Fruit	Nov. 29, 1945	60			
The French Touch	Dec. 8, 1945	33			
Brighten the Corner	Dec. 12, 1945	29			
Hamlet (R)	Dec. 13, 1945	131			
Dream Girl	Dec. 14, 1945	279*			
Billion Dollar Baby (MR)	Dec. 21, 1945	219			
Dunngan's Daughter	Dec. 26, 1945	38			
Pygmalion (R)	Dec. 26, 1945	181			
Home of the Brave	Dec. 27, 1945	69			
Show Boat (R)	Jan. 5, 1946	324*			
A Joy Forever	Jan. 7, 1946	16			
The Would-be Gentleman (M)	Jan. 9, 1946	77			
The Winter's Tale	Jan. 15, 1946	39			
Nellie Bly (M)	Jan. 21, 1946	16			
The Magnificent Yankee	Jan. 22, 1946	159			
O Mistress Mine	Jan. 23, 1946	239*			
Born Yesterday	Feb. 4, 1946	297*			
January Thaw	Feb. 4, 1946	48			
Apple of His Eye	Feb. 5, 1946	118			
Lute Song (M)	Feb. 6, 1946	142			
The Duchess Misbehaves (M)	Feb. 13, 1946	5			
Antigone (R)	Feb. 18, 1946	64			
Jeb	Feb. 21, 1946	9			
Truckline Cafe	Feb. 27, 1946	13			
Little Brown Jug	Mar. 6, 1946	5			
Three to Make Ready (MR)	Mar. 7, 1946	255*			
Flamingo Road	Mar. 19, 1946	7			
He Who Gets Slapped	Mar. 20, 1946	46			
I Like It Here	Mar. 22, 1946	4			
The Song of Bernadette	Mar. 26, 1946	3			
Walk Hard	Mar. 27, 1946	7			
St. Louis Woman (M)	Mar. 30, 1946	113			
Candida (R)	Apr. 3, 1946	24			
Woman Bites Dog	Apr. 17, 1946	5			

*Still running as of October 15, 1946. (M)—Musical; (MR)—Musical Revue; (R)—Revival.

CONCERT MUSIC 1945-1946

OPERA REVIEW 1945-1946

by

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critic, composer and author of *Of Men and Music*

IN THE MARCH of musical seasons, the one of 1945-1946 will be officially noted as the first of the new peacetime. As it occurred, however, it was easily recognizable as the last of the lingering wartime. There was the same dependence on performers, native and foreign, who had lived here during the war years; the same multiple appearances by celebrities not yet able to resume touring the world.

Beginning its 104th season with a program that included Aaron Copland's "Appalachian Spring," the New York Philharmonic-Symphony Orchestra sounded a note that echoed repeatedly in other orchestral activities elsewhere. The same work was included on the opening program of the Cleveland Orchestra, and was played by the Boston Symphony at home and on tour, and by a dozen other organizations in the course of the year.

From the dozens of new American works presented in New York during the year, the members of the Music Critics' Circle selected Samuel Barber's cello concerto as the best they had heard. It was played for the first time at an April matinee of the Boston Symphony Orchestra, with Serge Koussevitzky conducting and Raya Garbousova as soloist.

Another native work of consequence was Marc Blitzstein's "Airborne" Symphony, for orchestra, narrator, chorus and soloists, which was introduced by Leonard Bernstein and the New York City Symphony at the City Center. Planned by the composer while serving as a member of the 8th Air Force in England, it was not completed until he had returned to civilian life. Orson Welles was the narrator at the first performance. Another memento of army life was Barber's setting of Stephen Spender's "A Stop Watch and an Ordnance Map" which the Collegiate Chorale, directed by Robert Shaw, sang with great effect at a Carnegie Hall concert.

The most sizable of the foreign novelties was Serge Prokofiev's fifth symphony, first played in New York by the Boston Symphony, repeated at a later visit, and offered by Artur Rodzinski to the audiences of the Philharmonic-Symphony Orchestra during its subscription season. Igor Stravinsky brought a new symphony with him when he served as guest conductor of the Philharmonic, and Roy Harris appeared to conduct his own "Memories of Childhood," dedicated to a small son of the music director of the same orchestra.

The other orchestras and conductors offered plenty of standard fare. In their own cities, the leading organizations paid tribute to the masters as follows: Beethoven (Philharmonic, 12, Philadelphia, 10, Boston, 9); Tchaikovsky (9, 6, 5); Brahms (6, 9, 6); Wagner (9, 10, 6); Mozart (6, 5, 6). Bruno Walter contributed his own kind of novelty to the New York season by conducting two symphonies of Mahler—the 9th with the Philharmonic, the 4th with the Philadelphia.

In other respects, the symphonic season in New York was marked by Leonard Bernstein's succession to Leopold Stokowski as director of the City Symphony. In spite of a disorderly schedule and limited rehearsal time, he maintained a surprisingly high quality of performance, a tribute both to his talent and the enthusiasm of his players. Most of his programs blended contemporary works of established favor—such as Milhaud's "Creation of the World"—with standard works not over-played—such as Schumann's Symphony No. 2.

In common with orchestras elsewhere, those of New York, Boston and Philadelphia marked the death of Bela Bartok (shortly before the opening of the season, in September 1945) with performances of works written by the eminent Hungarian composer dur-

ing the final years of his life, while a resident of this country. The remarkable vitality of the music was uniformly commented upon by the press, and a skeptical public responded with enthusiasm to music of its own time which spoke with timeless accents.

Following the completion of the season in its own city, the Philadelphia Orchestra undertook one of the longest tours in American orchestral history, a tour that extended as far west as Vancouver, British Columbia, and as far south as New Orleans—altogether a total of 39 appearances in 30 cities. Washington made its own kind of symphonic news when a performance of Beethoven's Ninth Symphony included in the audience President Truman and members of his family. It was noted with wonder that the President followed the progress of the music from a score.

A major change in the symphonic line-up occurred in midwinter with the announcement that George Szell, a member of the Metropolitan Opera's conducting staff, would succeed Erich Leinsdorf as music director of the Cleveland Orchestra. The oft-rumored retirement of Koussevitzky from the Boston Orchestra loomed again on the horizon, stimulated by the announcement that he would limit himself to thirteen weeks' conducting in the season to come.

Arturo Toscanini, at 79, continued to provide the most virile and enlivening performances to be heard anywhere in his several series of appearances with the NBC Orchestra, broadcast through the sponsorship of the General Motors Corporation. As a special observance of the fiftieth anniversary of the Italian premiere of Puccini's "La Bohème" Toscanini undertook a broadcast of the opera on two successive Sunday broadcasts. It was the first performance in this country of an opera under Toscanini's direction in thirty years, and was universally hailed for the revelation that it was.

The year also had its interests in the recital field, most of them contributed by vocalists of long standing. Lotte Lehmann, Frieda Hempel and Povla Frijsh sang repeatedly to sold-out halls; and the unquestioned toast of the season was the English soprano, Maggie Teyte, who had not appeared here since the late thirties, and then with indifferent success. Now a high priestess complete with cult, she had the admirers of her phonograph recordings of French songs as the backlog of an audience that filled Town Hall to the walls half a dozen times during the year. Giuseppe de Luca returned late in the season to show how a voice discreetly used can retain its beauty through fifty years of service, singing both in concert and opera. Heartened by these manifestations, Maria Jeritza also braved a recital (in Carnegie Hall). She looked magnificent.

Marian Anderson celebrated the tenth anniversary of her concert debut in New York (she actually began her career as a competition winner at the Lewisohn Stadium in 1927) and Joseph Szigeti, the twentieth of his. Long past such anniversaries were Kreisler and Heifetz, Horowitz, and Rubinstein, who continued their amazing record of making virtually any appearance a gala occasion.

A notable absence of chamber music programs other than those presented by the New Friends of Music in their subscription series was attributed, by some, to the war and the lack of new ensembles from abroad. Others observed, however, that an appearance for the New Friends accomplished the purpose of obtaining reviews without the gamble involved in a self-sponsored recital.

A few faces which had been missing for some time returned as the season progressed. Albert Spalding resumed his place as dean of American violinists after several years as an officer in Italy; Eugene List played again after several years service (not as an officer) in France and Germany. It was not until the season was virtually at an end that a fresh personality arrived to stimulate conversation. The critic who deemed it appropriate to say of Maryla Jonas, Polish refugee who came to Carnegie Hall by way of South America, that she was "the greatest woman pianist since Teresa Careno" may have bitten off more than Miss Jonas could chew. However, the handful of listeners who were present when she first appeared were replaced by thousands when she played again a few weeks later; and the roster of the season's soloists with the Philharmonic-Symphony Orchestra shows, now, that the name of Jonas led them all.

1946 Record of Major Orchestras

Source: Questionnaires to orchestras.

Organizations	Permanent conductor	Associate conductor	Guest conductors	No. of players	No. of concerts	Est. attendance	Budget for 1946	Guarantee fund	Other sources of income	Radio broadcasts	Recording affiliation	Home auditorium	Capacity	Ticket prices
Baltimore Sym. Orch.	Reginald Stewart	Ilya Skolnick	None	81	37 home 30 road	155,000	\$175,720	\$110,000	\$54,500 (Municipal Tax)	4 (local) 11 (children's)	None	Lyric Theatre	2,651	\$1.21 to \$3.62
Boston Sym. Orch. (1)	Serge Koussevitzky	Richard Burgin	Bruno Walter, Leonard Bernstein	106	60 home 47 road 58 Pop. 11 Tan- glewood	560,000	\$1,000,000	\$57,978 (Gifts) \$16,760- \$97,000 (Endow- ment Fund)	\$216,000 (Radio) \$97,000 (Records)	45 ABC (Allis- Chalmers)	RCA- Victor	Symphony Hall	2,831	\$.50 to \$4
Buffalo Philharmonic (2)	Wm. Steinberg	Rudolph Doblin	None	82	30 home 10 road	125,000	\$198,950	\$93,000	\$15,000 (Municipal Grant)	None	Pending	Kleinhaus Hall	2,839	\$7.20 to \$18 (Subscription)
Chicago Sym. Orch. (3)	Desire Defauw	Hans Lange	Fritz Busch, Bruno Walter, George Szell, Charles Munch	100	96 home 30 road	315,500	\$540,664	\$78,162	Not specified	43 (local)	RCA- Victor	Orch. Hall	2,068	\$1.50 to \$5
Cincinnati Sym. Orch.	Eugene Goossens	Walter Heermann	Paul Paray, Leonard Bernstein	86	50 home 60 road	263,714	\$362,000	\$60,000	\$108,000 (Endow- ment Fund)	None	RCA- Victor	Music Hall	3,460	\$1 to \$4
Cleveland Orchestra (4)	George Szell	Rudolph Ringwall	Bruno Walter, George Enesco, Igor Stravinsky	93	111 home 32 road	290,000	\$510,000	\$150,000 (Endow- ment Fund)	Not specified	26 (CBS)	Colum- bia	Severance Hall	1,896	\$19.20 to \$60 (Subscription)
Denver Sym. Orch.	Saul Caston	Robt. Gross	None	85	30 home 5 road	48,000	\$200,000	\$150,000	None	None	None	Denver Auditorium	3,200	Not specified

1946 Record of Major Orchestras—(cont.)

Organizations	Permanent conductor	Associate conductor	Guest conductors	No. of players	No. of concerts	Est. attendance	Budget for 1946	Guarantee fund	Other sources of income	Radio broadcasts	Recording affiliation	Home auditorium	Capacity	Ticket prices
Detroit Sym. Orch. (5)	Karl Krueger	Valter Poole	None	95	40 home	80,000				Pending	RCA-Victor	Music Hall	1,878	\$1.20 to \$3.60
Houston Sym. Orch.	Ernst Hoffmann	None	Carlos Chavez, Efrem Kurtz, Reginald Stewart	70	23 home 6 road	110,000	\$200,000	None	Radio contract	39 (26 For radio only)	None	City Auditorium	3,900	\$.75 to \$3.60
Indianapolis Sym. Orch.	Fabien Sevitzy	Renato Pacini	None	85	42 home 40 road	160,525	\$240,000	\$75,000	\$50,000 (Municipal Grant)	Pending	RCA-Victor	Murat Theatre	1,923	\$1.20 to \$4.20
Kansas City Phil. Orch.	Efrem Kurtz	David Van Vactor	Andre Kostelanetz	74	70 home 10 road	140,000	\$195,000	None	\$50,000 (Maintenance Fund)	20 (local)	None	Music Hall	2,572	\$1.22 to \$4.88
Los Angeles Phil. Orch.	Alfred Wallenstein	None	Charles Munch, Lukas Foss	94	47 home 49 road	196,722	\$426,102	None	None	ABC	Decca	Phil. Auditorium	2,667	\$.75 to \$3.90
Minneapolis Sym. Orch.	Dimitri Mitropoulos	Yves Chardon	None	85	40 home 72 road	320,000	\$315,000	\$147,000	None	9 Young People's	RCA, Columbia	Cyrus Northrop Memorial Auditorium	4,850	\$1.50 to \$3.50
New Orleans Sym. Orch. (6)	Massimo Freccia	None	None	76	33 home 10 road	85,100	\$165,000	\$90,000	None	None	None	Municipal Auditorium	2,700	\$12.50 to \$30 (Subscription)
N. Y. City Symphony	Leonard Bernstein	None	None	80	20 home	50,000	None	None	None	10 (local)	RCA Victor	City Center	2,692	\$.90 to \$2.40
N. Y. Phil.-Symph. Soc. (7)	Artur Rodzinski	Walter Hendl	Leopold Stokowski, Bruno Walter, Charles Munch, George Szell	103	102 home 32 road	300,000	\$835,410	None	Investments, Radio M'mship.	28 CBS	Columbia	Carnegie Hall	2,354	\$1.10 to \$3.90

Philadelphia Orch. (8)	Eugene Ormandy	Alexander Hilsberg	Pierre Monteux, Bruno Walter, Saul Caston	101	72 home 59 road	447,000	Pending	None	\$52,000 Income from Endowment Fund	26 CBS	Columbia RCA	Academy of Music	3,152	\$.50 to \$4
Pittsburgh Sym. Orch.	Fritz Reiner	Vladimir Bakaleinikoff	None	90	87 home 35 road	185,600	\$525,000	\$225,000	Recording income, etc.	None	Columbia	Syria Mosque	3,729	\$.50 to \$3
Rochester Phil. Orch.	Guy Fraser Harrison	Dr. Paul White	Sir Thomas Beecham, Leonard Bernstein, Dimitri Mitropoulos, A. Rodzinski	82	50 home 15 road	123,000	\$211,000	\$118,000	None	None	RCA Victor	Eastman Theatre	3,729	\$1 to \$2.50
San Antonio Sym. Soc.	Max Reiter	None	Igor Stravinsky	76	37 home 8 road	135,000	\$275,000	\$115,000	None	20 (local)	None	Municipal Auditorium	5,833	\$1.20 to \$3.60
San Francisco Sym. Orch.	Pierre Monteux	James Sample	None	100	87 home 60 road	300,000				"Standard of Cal."	RCA Victor	Opera House	3,252	\$1.20 to \$3
St. Louis Sym. Society	Vladimir Golschmann	Harry Farbman	None	85	71 home 4 road		\$300,000	\$120,000		None	RCA Victor	Kiel Municipal Auditorium	3,535	\$.95 to \$4.20
Washington, D. C. National Symphony Orch. (9)	Hans Kinder	Howard Mitchell	Pending	95	65 home 55 road	220,000	\$356,450	\$150,000		None	RCA Victor	Constitution Hall	3,834	\$.60 to \$2.40

SUMMER ACTIVITIES

- (1) Esplanade, Boston: Tanglewood, Mass. (capacity 10,000, \$1 to \$5, four series of three concerts each).
- (2) Kleinhans Hall (capacity 2,939, \$.60 to \$1.20, fourteen concerts).
- (3) Ravinia Park (capacity 1,000 reserved seats, \$1.25, many free listeners accommodated, 6 weeks' season).
- (4) Public Auditorium (capacity 7,500, \$.60 to \$1.80, 10 weeks' season).
- (5) Music Hall (capacity 2,000, \$1.20 to \$2.40, 27 events).
- (6) Beauregard Square (capacity 1,850, \$1.25 to \$2.20 concerts).
- (7) Lewisohn Stadium (capacity 22,000, \$.25 to \$2.40, 11 weeks' season).
- (8) Robin Hood Dell (capacity 14,000, \$.25 to \$1.65, 10 weeks' season).
- (9) Watergate (seats for 8,000, additional room for 20,000, \$.50 to \$2.40, 6 weeks' season).

Opera Review

1945-1946

AS IN MOST of the dozen years past, the opera season in the United States was principally an account of the activities of the Metropolitan Opera Association, in New York and on tour. There was the customary spell of performances elsewhere, with Chicago sponsoring a four-weeks' season and San Francisco one of similar duration. For the most part, however, they were performances by Metropolitan artists under local auspices.

Though the Metropolitan season was not as long as some, it marked a resurgence toward the peak. The eighteen weeks marked also a mid-point between the extremes of 24 weeks (1928-29) and 14 weeks (1935-36). During this year's period, 137 performances were presented, including ten in Philadelphia; the eighteen Saturday matinees were heard, as usual, not only by capacity audiences in the theatre, but also by a vast radio audience extending from the Hawaiian Islands to Europe.

Beginning on April 1st, the company followed its customary visits to Baltimore and Boston with a circuit that extended from Chicago to Dallas, with Cleveland, St. Louis, Memphis and Chattanooga as way points. Sold-out attendances were the rule of the run, with more cities petitioning for appearances than could be accommodated.

For the most part, the company was dependent on artists under contract to it from the previous year. However, there were a few worthwhile recruits from other sources. The first of them, Torsten Ralf, made his debut as Lohengrin at the opening performance on November 26, 1945. The Swedish tenor demonstrated the abilities that had made him a standard performer at European opera houses in prewar days, adding able impersonations of such roles as Tannhaeuser, Otello, Parsifal and Walther von Stolzing in "Meistersinger" as the season progressed.

Several of these works profited from the season's other important newcomer—the baritone Joel Berglund. His Hans Sachs, together with his Wotan in "Walkure", established him as the best qualified baritone the Metropolitan has had for these roles since the prime of Friedrich Schorr.

Also of note in the opening "Lohengrin" was the conducting of Fritz Busch, one of the first German musicians to defy the Nazis when he was general director of the Dresden Opera in 1933. In addition to "Lohengrin", he conducted a revival of Donizetti's "Don Pasquale", also "Tannhaeuser" and "Tristan". The opening night, for the first time in history, was broadcast with a full quota of notes, musical and sartorial.

The steady stream of young American singers who have passed through the Metropolitan's stage door in the last decade was swelled this season by two of the most talented of them. Both came with a background in radio which hardly compared with the traditional training of La Scala or the Monnaie in Brussels. However there was no charge of incompetence leveled against either Dorothy Kirsten or Robert Merrill. In addition to Mimi in "Bohème", which was her debut role, Miss Kirsten sang a creditable Violetta in "Traviata" and a performance of Juliet. Merrill's two roles were Escamillo in "Carmen" and the elder Germont in "Traviata", both notable for voluminous tones of real beauty.

There was a full quota of other "first performances" by established members of the company. Two of the more interesting were Risè Steven's first effort as Carmen and Stella Roman's Mimi. Stevens offered a Carmen on the German model and was scolded by some critics for a little more restraint than they thought appropriate. Roman brought no special qualities to her Mimi other than a beautiful voice and a rather wistful manner.

In deference to the new amity in the Far East, the Metropolitan restored Puccini's "Madame Butterfly" to the repertory after a lapse from—of all dates—December 6, 1941. Licia Albanese resumed her stylish Butterfly, with James Melton as Pinkerton for the first time.

As in the seasons immediately preceding, there were as many persons drawn to an opera by the answer to "Who is conducting?" as there was to "Who is singing?" In

addition to Busch and Sodero, the weekly lists offered a sequence of Bruno Walter (doing "Fidelio", "Magic Flute" and "Masked Ball"), George Szell ("Don Giovanni", "Rosenkavalier", "Meistersinger", "Goetterdaemmerung" and "Otello") and Emil Cooper ("Romeo", Parsifal" and "La Gioconda").

The "only yesterdays" of opera were recalled when Lauritz Melchior celebrated his twentieth year as a member of the company on February 26, 1946. Though it was not until the season of 1927 that Ezio Pinza joined the company, the favorite Italian chose to celebrate his twentieth year at the house in the spring of '46. The occasion was the last of five performances of "Don Giovanni", for whose present-day popularity Pinza has been in large part responsible.

Even after the Metropolitan departed on its tour, there was no lack of opera in New York. Fortune Gallo brought his San Carlo Opera Company into the Center Theatre for some twenty performances, distinguished largely for their inexpensiveness. Before his three weeks were concluded, the City Center embarked on its own enterprise, featuring young American artists. However, the largest share of news space was won by two newcomers—the young Negro soprano Camilla Williams, who sang an uncommonly skillful Butterfly in her first New York stage appearance; and a stalwart baritone from Italy, Enzo Mascherini.

At the conclusion of its 61st season of operations, the Metropolitan Opera Association offered the following figures concerning its operations:

Income	
New York	\$1,571,297.94
On tour	679,771.71
Broadcasts	171,494.10
Additional, to total	<u>\$2,627,852.65</u>
Expenses	
Singers and conductors	\$631,545
Orchestra	438,124
Chorus	252,315
Ballot	52,383
	<u>\$1,374,368</u>
Executive and clerical	144,266
Stage department	140,189
Building operation	425,482
RR, transfer and travel	202,544
Additional, to total	<u>\$2,488,735</u>
Operating profit before taxes, interest and depreciation	
	\$139,117
Real estate tax	\$32,125
Interest expense	44,623
Depreciation provision	50,000
	<u>\$126,748</u>
Operating gain, year ending May 31, 1946	
	\$12,368.95

Radio Poll

To encourage the interest of its radio listeners, the Metropolitan invited them to vote, in two categories, for works to be included in the 1946-1947 series of broadcast performances. One was a selection of five operas from the general repertory; the other a selection of five operas from works which have been absent from the repertory for various lengths of time. The results were as follows:

General repertory		Special repertory	
Aida	16,345	Haensel und Gretel	14,645
Carmen	13,257	Boris Goudonoff	12,740
Traviata	11,749	Rosenkavalier	12,598
Tristan	11,312	Otello	11,343
Bohème	10,779	Bartered Bride	11,036

THE SCREEN

by

HOWARD BARNES

movie critic N. Y. *Herald Tribune*

RECONVERSION was no great problem for the screen in 1946. What with expert craftsmen discarding uniforms and a backlog of important films caused by booking jams, there was an ample supply of motion-picture entertainment. The demand was strikingly manifested in booming box-office business. Unfortunately this happy balance of economic pressures rarely found commensurate reflection in terms of artistry. There was more than a little groping along well-channeled production paths. There was a minimum of the exciting experimentation, or the knowing handling of cinematic fundamentals, which inspire memorable achievements.

Being the most popular of contemporary art forms, the screen is inevitably conditioned by the passing scene. Since the contours of this were as erratic as a seismographic recording of a distant earthquake, film-makers plunged hard for what is vaguely known as escapist material. Lavish musicals dotted the year's screen landscape. Out and out comedies and tough melodramas shouldered the song and dance festivals for top honors. Since many of these were made with skill and chromium-plated production finish, they maintained a reasonable average of diversion. Wanting were films to rank with "The Lost Weekend" of the year before in freshness of theme and urgency of treatment.

A notable exception was "The Best Years of Our Lives," which proved a dramatic and moving account of service men returning to civilian life. Robert E. Sherwood's adaptation of MacKinlay Kantor's novel was eloquent, honest and nicely articulated, while William Wyler's consummate direction sustained what was essentially a piece of contemporary reportage. Fredric March, Myrna Loy, Dana Andrews, Teresa Wright and Harold Russell, who actually lost his arms in World War II, gave explicit and brilliantly contrasting portrayals, to reveal both sides of the human reconversion medal. The Samuel Goldwyn production was as audacious as it was artful. In contrast to other motion pictures, it had an immediate and powerful appeal.

"The Razor's Edge," "The Yearling," "Anna and the King of Siam," and "The Green Years" succeeded best in making filmgoers forget immediate postwar problems by the enchantment of eloquent imagery and drama. "A Walk in the Sun" and "Sister Kenny" were more exploratory in their approach to the medium.

Perhaps the complete expression of Hollywood's diffidence in tackling contemporary themes was the screen adaptation of the Marjorie Kinnan Rawlings' Pulitzer Prize winning novel. Its account of a small boy growing up in the bayou country of Florida after the Civil War is tender, beautiful and remote. The eight years that Metro-Goldwyn-Mayer spent in making "The Yearling" have borne rich fruit. While it has several brilliantly contrived animal scenes as the lad's pet deer matches his growth in the critical emergence from childhood, it is essentially a moving and absorbing recreation of human experience. Clarence Brown's direction accents the sentimental aspects of the original, but it has sweep and power. Gregory Peck, Jane Wyman and little Claude Jarman give the star system a jolt with their consummate portrayals of the leading roles. And the Technicolor should stand for some time as a model for superb tinting.

"The Razor's Edge" is an equally fine translation of a book to a motion picture. Twentieth Century-Fox recaptured the turgid drama and Gallic atmosphere of Maugham's novel in a striking manner. Tyrone Power endowed the film with a memorable performance. Clifton Webb, Gene Tierney, Anne Baxter and the others in the cast filled in the background of a modern Pilgrim's Progress splendidly and Edmund Goulding's staging proved a top job.

In "Anna and the King of Siam" there was a daring departure from obvious conven-

tions by the same studio. Margaret Landon's biography of an Englishwoman who found herself instructing the harem of an Oriental despot found full and fascinating realization in John Cromwell's knowing staging of the production and the fully dimensioned portrayals of the lady and the king by Irene Dunne and Rex Harrison. "The Green Years" proved another family portrait of a vanished era as it described an Irish Catholic lad living his formative years in a dour Scotch community. The A. J. Cronin novel was well-served by Charles Coburn's lusty playing and Victor Saville's realistic staging.

Although there was a concerted policy on the part of the studios to forsake war pictures, one of the best of them all was "A Walk in the Sun." Harry Brown's fine story of foot soldiers fighting a small battle in a global war on an Italian beach-head found absorbing film interpretation in the direction of Lewis Milestone, celebrated for another war chronicle, "All Quiet on the Western Front." His concentration on significant detail in what was a minor skirmish made the work an epic of embattled democracy. Dana Andrews and an all-male company collaborated superbly with him in an honest and distinguished film. Similar integrity characterized "Sister Kenny." Although a frankly biased biography of a controversial figure in the treatment of poliomyelitis, it proved an engrossing account of the age-old struggle between reactionary and radical forces in medical science and a glowing portrait of a courageous nurse. Rosalind Russell did wonders in giving the piece humanity and urgency. Dudley Nichols, as producer-writer-director, turned in one of the finest jobs of his career.

The outstanding musicals of the year are best described by their subjects and their stars. A new cycle was in evidence as contemporary music-makers were eulogized in so-called biographies. "The Jolson Story" was an affectionate account of the celebrated mammy singer, distinguished by knowing shots of shifting styles in show business. "Blue Skies" had Fred Astaire and Bing Crosby in their dancing, singing routines with a prodigal accompaniment of Irving Berlin songs. Cole Porter's tunes enlivened "Night and Day," with Cary Grant in the dubious central characterization.

The great Walt Disney illustrated a group of compositions in "Make Mine Music" with animated cartoons, but the film proved extremely uneven. In "Song of the South" he made what he termed a "live action musical drama."

The accent was more on comedy than music in the case of "Road to Utopia," which found Big Crosby and Bob Hope romping through a hilarious entertainment. From an escapist standpoint it proved one of the most satisfying offerings of the year. "Two Sisters From Boston" was a similar amalgam of clowning and singing, the former richly underlined by Jimmy Durante. "Ziegfeld Follies," on the other hand, suggested that the hit or miss revue was not the most felicitous screen form.

The best of the plotted comedies were "The Kid From Brooklyn" and "Cluny Brown." The former spoofed the prize fight racket with regaling results as Danny Kaye contributed another performing tour-de-force. The latter was marked indelibly by the well-known directorial touch of Ernst Lubitsch, and a charming portrayal of a dizzy plumber's daughter by Jennifer Jones. Screen melodramas maintained a higher standard of quality than the comedies. The motion picture extension of Ernest Hemingway's short story, "The Killers," was savagely arresting. "Notorious" found the gifted Alfred Hitchcock using all his melodramatic tricks on a spy story, enhanced for fans by the acting of Ingrid Bergman and Cary Grant in the leading roles. "The Spiral Staircase," "The Dark Mirror," "Undercurrent," "The Chase" and "Duel in the Sun" were other notable motion picture blends of terror and suspense.

Historical subjects were given indifferent projection. "Two Years Before the Mast" had moments of maritime magnificence, but they were rather smothered in variations on the original book. "Kitty" paraded Paulette Goddard in a series of stunning costumes, but its dramatic compulsion was faltering. The brilliant documentaries which distinguished the war years were conspicuous by their absence.

From abroad came a number of choice productions. Laurence Olivier, who gave the theatrical season renewed vitality in the Old Vic repertory, brought Shakespeare miracu-

lously to the screen in the British-made "Henry V." Noel Coward's "Brief Encounter," the semi-documentary, "The Raider" and the adaptation of Shaw's "Caesar and Cleopatra" were other striking English importations. The French cinema contributed "The Well-Digger's Daughter" and "Portrait of a Woman" and Italy sent over a somber story of resistance, "Open City." From the U. S. S. R. came "The Turning Point," a brilliant semi-documentary account of the siege of Stalingrad.

The commercial aspects of the year were gratifying for the screen industry, but there were portents of radical changes in production. The abolishing of block booking caused many studios to abandon class B productions and there were those who foresaw the phenomenon of films failing at the box office. At the same time this concentration of individual offerings promised rich opportunities for individual and courageous achievements. Labor conditions were at a crucial point at the year's close.

Film Box-Office Leaders

Although it must be borne in mind that returns were not in on such year-end releases as "The Best Years of Our Lives," "The Razor's Edge," "The Yearling," "Undercurrent" or "Song of the South," the leading box-office attractions of the year may be tabulated as follows:

"Adventure" (Clark Gable, Greer Garson)
 "Anna and the King of Siam" (Irene Dunne, Rex Harrison)
 "The Bandit of Sherwood Forest" (Cornel Wilde, Anita Louise)
 "The Big Sleep" (Humphrey Bogart, Lauren Bacall)
 "Blue Skies" (Bing Crosby, Fred Astaire)
 "Caesar and Cleopatra" (Vivien Leigh, Claude Rains)
 "Canyon Passage" (Dana Andrews, Brian Donlevy, Susan Hayward)
 "The Dark Mirror" (Olivia de Havilland, Lew Ayres)
 "Easy to Wed" (Van Johnson, Keenan Wynn)
 "Gilda" (Rita Hayworth, Glenn Ford)
 "The Harvey Girls" (Judy Garland, John Hodiak)
 "Henry V" (Laurence Olivier)
 "The Jolson Story" (Larry Parks, Evelyn Keyes)

"The Kid From Brooklyn" (Danny Kaye)
 "The Killers" (Burt Lancaster, Ava Gardner)
 "Night and Day" (Cary Grant, Alexis Smith, Monty Woolley)
 "Notorious" (Cary Grant, Ingrid Bergman)
 "The Outlaw" (Jane Russell)
 "The Postman Always Rings Twice" (Lana Turner, John Garfield)
 "Road to Utopia" (Bing Crosby, Bob Hope)
 "Scarlet Street" (Edward G. Robinson, Joan Bennett)
 "Sentimental Journey" (John Payne, Maureen O'Hara)
 "Smoky" (Fred MacMurray, Anne Baxter)
 "The Spanish Main" (Paul Henreid, Maureen O'Hara)
 "The Spiral Staircase" (Dorothy McGuire, George Brent)
 "A Stolen Life" (Bette Davis, Glenn Ford)
 "The Strange Love of Martha Ivers" (Barbara Stanwyck, Van Heflin)
 "Three Little Girls in Blue" (June Haver, George Montgomery)
 "Two Years Before the Mast" (Alan Ladd, Brian Donlevy)



RADIO

by

JOHN CROSBY

radio critic N. Y. Herald Tribune

DURING THE FOUR war years the broadcasting industry enjoyed a period of unparalleled profits while the nation's radio listeners were plagued by increasing and unchecked commercialism. Despite this, radio gained new prestige and many new listeners who tuned in to hear the news broadcasts and forgot to turn off the radio when they ended, thus gradually acquiring the listening habit.

In 1946 the roof, while it did not fall in, sagged dangerously. In the first place radio came in for the most sustained and violent barrage of criticism in its twenty-six-year history from newspapers, magazines and the Federal Communications Commission. Sec-

only, the bottom fell out of the broadcaster's pocketbook when advertisers slashed their war-swollen accounts to, and sometimes below, prewar levels.

The torrent of criticism was touched off by the Federal Communications Commission which on March 7 issued a carefully documented, 139-page report entitled "The Public Service Responsibility of Broadcast Licensees." In this, the FCC charged there had been a serious deterioration in broadcasts standards in the last five years. The report detailed shocking differentials between the promises made by broadcasters when they received their licenses and their actual performance afterward. It listed one station, KMAC, San Antonio, Texas, which carried 2,215 commercials in 133 hours of broadcasting, an average of 16.7 an hour. The FCC deplored the fact that as many as 55 of the 59 and a half hours of network daytime broadcasting were given over to soap opera and pointed out that, as a consequence of this sudsy caterwauling, 78 percent of the nation's radio sets were turned off in those hours. In conclusion, the commission warned that in the future a radio station's performance would be studied when the time came to renew its license—a clear warning to broadcasters to operate in the public, rather than their own, interest or face revocation of their licenses.

The report, labeled *The Blue Book* after the color of its cover, brought outraged howls from the broadcasters who had become accustomed to thinking of the FCC as a bit of a joke. Justin Miller, president of the National Association of Broadcasters, which represents two-thirds of the nation's radio stations, declared that the FCC was trying to impose governmental control over what the people of the country shall hear. Apart from "The Chicago Tribune" and the Hearst newspapers, Judge Miller had little other public support for this view. "The New York Times," "The New York Herald Tribune," "The St. Louis Post-Dispatch," "Life" magazine, "Variety" and a host of other newspapers supported the view of the commission that radio needed a house cleaning. Many of them voiced the opinion that radio would be wise to do its own house cleaning rather than let the government do it for them.

The editorial in "Life" summed up the opinion of many of the nation's more intelligent listeners: "The American radio currently presents one of history's most amusing, yet disturbing instances of mankind's technology getting ahead of its culture . . . In twenty-five years radio has advanced technically from the cat whisker and crystal to almost full color video. But in the same time it has progressed from Graham McNamee to Gabriel Heatter . . . from Jack Pearl to Milton Berle. We have the new theater, plush seats, gold curtain, but where is the show?"

Criticism mounted not only from without but from within. At an Oklahoma City radio convention, Arch Oboler, one of radio's most progressive writers, charged that radio was "burying itself under a heap of humbug." At the Institute for Education by Radio at Ohio University, Nathan Straus, president of station WMCA in New York, said the broadcasters' reaction to *The Blue Book* was "hysterical denunciation." He urged that the broadcasters cooperate with the FCC in order to wrest from the advertisers their predominant control of radio programing.

Did any of this outburst of condemnation do any good? Cynics both in and out of the industry doubt it. At the end of the year the fifteen programs with the top radio ratings contained seven names—Fred Allen, "Lux Radio Theater," Jack Benny, Bing Crosby, Amos 'n' Andy, Eddie Cantor and Walter Winchell—who had been in the first fifteen ten years earlier. Others on the list such as Charlie McCarthy, Red Skelton, Fibber McGee and Molly, and Bob Hope, were hardly new faces. There were no new ideas.

While Hooper ratings reflect popular taste rather than high critical standards, radio critics and writers agreed with the public in most respects. The winners of the annual "Radio Daily" poll, taken among 1,091 persons who write about radio for a living and presumably think about it more seriously than the average listener, were generally the same persons who enjoyed the highest Hooper ratings.

Bing Crosby, a veteran, and Dinah Shore, not exactly a newcomer, were way out in front among the popular vocalists. The New York Philharmonic and the NBC Symphony

topped the other symphony orchestras. Leading the soap operas—or dramatic serials as they would rather be known—was “One Man’s Family” which is practically as old as the audion tube. “Information, Please,” almost the original quiz show, led all others in quality. Bob Hope was both the nation’s and critics’ favorite comedian and entertainer.

“America’s Town Meeting of the Air,” practically the original forum program, headed the others in that category, and Bill Stern, NBC’s ace sports commentator, led all others in his field. “Lux Radio Theater” won both the popular and critical votes as the best dramatic program, although a fairly new full-hour program “Theater Guild of the Air,” gave it a lot of competition among the critics but not with the public.

A preview of the 1946–47 season by “Radio Daily” was not very encouraging. It listed 120 musical shows, 100 dramatic shows, many of them mysteries; countless strip serials or soap operas; forty quiz shows, most of them moronic, and even more than the usual number of give-away shows on which audience participants will be showered with nylons and iceboxes in exchange for making fools of themselves over a national hookup.

One ray of light shot through the gloom. Charles A. Siepmann, former counsel for the FCC, brought out a book called “Radio’s Second Chance” extolling frequency modulation—or staticless—radio. He pointed out that FM radio would open the way for 3,500 to 5,000 new radio stations. By eliminating the shortage of frequencies, FM would break the monopoly of the four networks and offer labor, educators and other minority groups a voice on the air—now so wholly controlled by laxative, cigarette and soap companies.

However, at the end of the year, FM was still a long way from the public. The eighty-five principal radio manufacturers set a production goal for the year of almost 22 million radios but only about 9 percent would be FM sets or would have FM bands. The FCC approved hundreds of applications for FM stations but construction was slowed by the shortage of building materials and by a natural reluctance to start FM operations when so few persons owned sets.

One other event deserves mention. On June 19, 45,000 persons watched Joe Louis club Billy Conn into unconsciousness at Yankee Stadium while an estimated 100,000 others saw the same knockout on television receivers in New York, Philadelphia and Washington. RCA’s miraculous new image orthicon camera brought the television audience a crystal-clear and far more intimate view of the fight than that of the stadium audience.



BALLET AND DANCE • PHONOGRAPHIC RECORDINGS

by

IRVING KOLODIN

music critic *New York Sun*,

author of *Guide To Recorded Music, The Metropolitan Opera*

The chronicle of ballet in America, where it has been a novelty, a fad and a much publicized “spectacle” since its re-introduction in 1932, entered upon a new cycle in 1946. Whereas it had originally been an appendage of the music managements, the emergence of four traveling groups, with large budgets and long tours, clearly placed it in the category of “show business”. In New York it was physically as well as figuratively a part of Broadway, with simultaneous appearances at the Metropolitan and the Broadway Theatre of two companies in the early fall.

The provocative element in the situation was provided by the Ballet Theatre, which resumed an independent career after four years under the banner of S. Hurok. The trend toward a conventional “lavish” repertory in the Russian manner was rejected in favor of a return to the more intimate productions which had characterized the company’s start. As a symbol of things to come, a principal novelty of the season in the Broadway Theatre was titled “Facsimile”, bringing together again the creators of the popular

"Fancy Free" (Jerome Robbins, choreographer, Leonard Bernstein, composer and Oliver Smith, scenic designer). It was joined by the English Frederick Ashton's "The Skaters" (to music of Meyerbeer) and a version of the now indispensable "Giselle" with decor by Eugene Berman. Among its personnel, Ballet Theatre welcomed back Igor Youskevitch as premiere dancer after a term of naval service, adding him to a roster which included Hugh Laing, Michael Kidd, John Kriza, Nora Kaye, Alicia Alonso and Lucia Chase.

As the nucleus of new activity, Hurok retained the services of the most publicized "team" in ballet, Alicia Markova and Anton Dolin. Such other luminaries of the Ballet Theatre as Andre Eglevsky, Rosella Hightower and George Skibine also chose to continue with the manager who had sponsored the revival of America's interest in ballet. As the basis of a repertory, he had "Giselle", for Markova; a series of standard works in versions by Dolin, and a new treatment of Dumas' "Camille" for Markova, with music of Schubert. He also had the Metropolitan Opera House as a frame for his presentations.

To fill out these valuable but insufficient attractions, he turned to Col. W. de Basil, with whom Hurok had launched ballet at the St. James Theatre in 1932. After five years in South America, Basil brought such established attractions as "Paganini", and "Scheherezade", and the symphonic ballets of Massine, none of them seen in the intervening period. The additional premieres of the season were Lichine's "Cain and Abel", and Psota's "Yara". After the New York season, Markova and Dolin resumed touring with the small unit of their own, joining with the main group for engagements in the larger road cities.

The other major company, which owns the rights to the phrase "Ballet Russe de Monte Carlo", suffered a blow to its New York season in the City Center of Music and Drama through an injury to Alexandra Danilova. Her scheduled appearance in the company's important novelty, "The Bells", was somewhat balanced by the willingness of Ruth Page, creator of the ballet, to dance the part she had invented.

A feature of the company's schedule continued to be works of George Balanchine—"Ballet Imperial", "Baiser de la Fee", "Mozartiana", "Night Shadow" and the newly revived "Serenade"—plus the exclusive rights to three of the most popular works to merge in recent ballet history: "Rodeo", "Beau Danube", and "Gaité Parisienne".

In the realm of what is known as "dance" rather than "ballet", 1946 was also a boom year. A spring season in New York by Martha Graham and her company, twice-prolonged, was the index to a popularity for this innovator greater than ever before. Such new works as "Appalachian Spring", with the much-admired score of Aaron Copland, as well as the Emily Dickinson-inspired "Letter to the World", and the ritualistic "El Penitente" gave a new variety to Graham's work.

While these groups were attracting most of the anticipation of dance lovers throughout the country, there were nearly a dozen others scheduled for New York engagements and nation-wide tours during the winter months. The most celebrated were the Jooss Ballet, with its famous "Green Table" and such favorite dancers as Noelle de Mosa, Rolf Alexander, Ula Soederbaum and Hans Zullig; and the Trudi Schoop ballet of "Fridolin" fame.

More than a few dancers of solid repute were concealed under such titles as "Ballet for America", "Fox Hole Ballet" and "Dance Trio", in which they found greater opportunities than existed in the larger, more routinized groups. Katharine Dunham interrupted a road tour to bring her "Bal Negre" company into New York for a month in the fall, when an unexpected theatre vacancy opened up.

Phonograph Recordings

IF THE multiplicity of labels and records to be seen in any music shop during 1946 suggested that this market was booming at a dizzy rate, there were ample supporting facts to be cited. More than 200 different brand names were attached to records issued in this year, mostly by independent companies which had few facilities other than "talent" and a sales force.

The allocation of materials and production facilities between popular and classical has not given the follower of the latter all they have wanted during the war years, and

expected to have again by this time. José Iturbi's earnings of \$118,000 from a single folio of Chopin music (a reproduction of his performances in "A Song to Remember") indicated that a boom exists in this field too, when merchandise is available. Neither Columbia nor Victor is in any respect abreast of the back orders for catalogue material with many famous albums out of stock for two and three years.

The Year's Notable Recordings CLASSICAL ALBUMS—ORCHESTRAL

Bach: Brandenburg Concertos No. 3 and 4. Brilliant performances by Serge Koussevitzky and the Boston Symphony, made in the Theatre-Concert Hall at Tanglewood. Superbly reproduced. (RCA-Victor)

Bizet: Symphony No. 1. A youthful masterpiece by the composer of *Carmen*, full of charm and freshness. Artur Rodzinski conducting the Philharmonic-Symphony Orchestra. (Columbia)

Copland: Appalachian Spring. A fine addition to the growing catalogue of American music on records. Written for Martha Graham and her Dance Group, *Appalachian Spring* has already passed its fiftieth performance by native orchestras. Serge Koussevitzky, who sponsored its concert hall debut, conducts the Boston Symphony in a performance of remarkable clarity and spirit. (RCA-Victor)

Haydn: Symphony No. 97 in C. Symphony No. 99 in B flat. Sir Thomas Beecham is responsible for the first of these, Toscanini for the second. Varied as the viewpoints of the two men are, the results are flattering to the composer, and gratifying to the listener. (Both RCA-Victor)

Mahler: Symphony No. 4. A sturdy, comprehending performance by Bruno Walter—friend and disciple of the composer—played with distinction by the Philharmonic-Symphony Orchestra. (Columbia)

Milhaud: Protée. The gendarmes were called to quell the rioting when Paris first heard this incidental music to Paul Claudel's play, but that was twenty-odd years ago. Pierre Monteux does a lively job of it with the San Francisco Symphony, and the sound from the grooves is stunning. (RCA-Victor)

Rachmaninoff: Concerto No. 2. Die-hards still prefer the composer's own playing of this music on records, but the progress in recording since it was made gives infinite advantages to Artur Rubinstein, the soloist in this version. A fluent and powerful performance by him is not too well supported by the playing of the NBC Orchestra under Vladimir Golschmann. (RCA-Victor)

Tchaikovsky: Swan Lake. A pleasurable collection of excerpts from the favorite ballet—including some not generally heard in the abridged versions recently popular—performed with verve and taste by Vladimir Golschmann and the St. Louis Symphony Orchestra. Brilliantly recorded. (RCA-Victor)

CLASSICAL ALBUMS—VOCAL

Mahler: Songs of a Wayfarer. First American recording of these expressive songs, with Carol Brice, contralto, and Fritz Reiner conducting Pittsburgh Symphony. (Columbia)

Schubert: Die Schöne Müllerin. Lotte Lehmann sings this cycle of songs (complete save for *Ungeduld*, which she has recorded previously) with fine art, and the emotion appropriate to them. (Columbia)

CLASSICAL ALBUMS—INSTRUMENTAL

Bach: Goldberg Variations. The year's most distinguished accomplishment by an American record firm, permitting a wider distribution of Wanda Landowska's matchless harpsichord performance than was possible with the subscription-sold version she made in prewar Europe. Recorded with care and notable success. (Victor)

Beethoven: Sonata in C minor, opus 30, No. 3. Isaac Stern and Alexander Zakin are not the most famous names that might be associated with a playing of this violin and piano sonata, but their qualities would be hard to surpass. The reproduction is outstandingly good. (Columbia)

CLASSICAL SINGLE RECORDS

Herold: Zampa Overture. A re-do of the entertaining old stand-by, notable for the energy and dash provided by Efrem Kurtz in his direction of the Philharmonic-Symphony Orchestra. Good full-range recording. (Columbia)

Mozart: Seraglio Overture. Beecham's Mozart is a legend, and this is the year's one new example of it. The London Philharmonic plays splendidly. (Victor)

Prokofiev: Overture on Yiddish Themes. An oddity concocted by Prokofiev during a visit to America in the 20s', it is played with humor by an ensemble of the small size for which it was intended. Well recorded. (DISC)

Verdi: Dite alla giovine (Traviata). The robust voice of the youthful Robert Merrill and the compelling one of Licia Albanese are perfectly blended in this exceptional operatic recording. (RCA-Victor)

Weber: Der Freischutz Overture. A whole philosophy of orchestral execution and musical virtuosity could be distilled from this single disk by Toscanini and the NBC Orchestra. Few recordings surpass it in realism and power. (RCA-Victor)

POPULAR ALBUMS

Grofé: Grand Canyon Suite. A triumph of adaptation by Arturo Toscanini, leading the NBC Orchestra in a light work rarely played with such virtuoso precision. The recording is splendid. (Victor)

Kern: Collection of Songs. Risë Stevens on a prima donna's holiday, singing this material with much more than customary taste. Alan Schulman's arrangements are likewise superior. (Columbia)

Porter: Collection of Songs. The latest of Artie Shaw's orchestra is one with strings, and they add much to the pleasures of these performances. *Love for Sale, Get Out of Town, Night and Day, You Do Something to Me* are some of the tunes played with grand verve and style. (Musicraft)

SHOW MUSIC

Berlin: Annie Get Your Gun. A generous review of the hit show, with Ethel Merman, Ray Middleton and the rest of the original cast. Not as good to hear as to see, but inimitable nevertheless. (Decca)

Rome: Call Me Mister. All the boys and girls from Jules Munshin to Betty Garrett, in high humor and good form. A very thorough job. (Decca)

Rodgers: Carousel Waltzes. Better sounding on a symphony orchestra than it was in the theater pit, due no little to the skillful hand of Fritz Reiner. (Columbia)

Sing Out Sweet Land. Alfred Drake and Burl Ives in a delightful compendium of Americana, plus such other helpers as Alma Kaye, Bibi Osterwald and Juanita Hall. The generous set of six records is decidedly worth owning. (Decca)

POPULAR AND DANCE

Ellington: Black, Brown and Beige. Two twelve-inch disks from the lengthiest of Duke's scores, including the famous *The Blues*. (RCA-Victor)

Herman: Wildroot. 1946 big-band jazz at its most typical. Not for the fainthearted. (Columbia)

King Cole Trio: Highway 66. 1946 little-group jazz at its most typical. Mischievous piano by Nat Cole, also insinuating voice by the same. (Capitol)

Leonard: They Say It's Wonderful. The best vocal version of this ballad from Annie, credited to Jack Leonard, ex-Dorsey vocalist. (Majestic)

Lee: Aren't You Kinda Glad. Well-phrased delivery of the best in the group of "new" Gershwin tunes, sung with proper meaning by Peggy Lee. (Capitol)

CHILDREN'S RECORDS

Tubby the Tuba. An entertaining creation by Paul Tripp and George Kleinsinger, in which musical instruments are humanized, for educational purposes, in a story pattern. Victor Jory makes a friendly-voiced narrator. (Cosmo)

THE YEAR IN ART

by

THOMAS CRAVEN

art critic, author of *Men in Art*, *Modern Treasury of Art Masterpieces*,
Story of Painting, *Cartoon Cavalcade*



IN THE FIELD of art, in 1946, two developments, or tendencies, predominated: first, the ascendancy of abstract, or non-objective painting in America; second, the cordial working relations established between art and industry. The first tendency pointed the way to confusion and disaster, and if sufficiently prolonged, may well result in the alienation of the growing popular support of art and in the possible collapse of a school of painters dealing realistically with life in the United States.

Abstract art. The rise of abstract art, commonly described as a shift to the Left, is without political significance although the founder of non-objective painting, Pablo Picasso, openly and boastfully espoused the communist cause. In the United States, as in other nations, the retreat from realism, or representation, may be largely attributed to postwar disillusionment. Indoctrinated against nationalism in all its forms, their hopes shattered by resounding talk of another world war, bereft of any unifying faith or compelling direction, artists everywhere began to flee from realities into a world of abstractions and to express themselves in a symbolical language. This language, it should be noted, is the technical derivative of Cubism and other sects born during and after World War I, an art idiom which has infiltrated into galleries and educational institutions throughout America. It has now become the prevailing language of hundreds of bewildered youngsters conscious of the woes of humanity.

In 1946, not only in the international exhibition rooms of New York but also in the Middle West, the Northwest, and California, the major emphasis was on abstract painting, or that form of art in which the natural physiognomy of a person or thing, and its organic shape and proportions, are abolished or converted into geometrical equivalents. It was a fine year for competitions and in most of the contests the top awards went to the non-realistic artists. To promote its fantastic wares, the heavily endowed Museum of Non-Objective Painting, of New York, displayed graphs and scale models of a proposed building, a new home, designed by the one and only Frank Lloyd Wright for a site on upper Fifth Avenue, a modernist structure resembling the latest style of electric washing machine with a transparent plastic blister for a dome, or top. In the High School of Music and Art, of New York, and in high schools of forty-eight States; in socially prominent academies, like Andover, talented youths were taught to delineate, not human features, but combinations of cubes and cones. At the University of Iowa, where the late Grant Wood set the example by his beautifully designed paintings of the central valleys and their inhabitants, cornfed students were counseled to imitate the distortions and triangulations of displaced abstractionists; and in Hollywood, motion picture producers began to traffic in surrealism.

Surrealism. Popularly introduced to America some years ago by the eccentric Spanish painter and window dresser, Salvador Dali, surrealism gained enormous momentum during 1946. Dali, technically gifted and a superior showman, designed dream sets for certain preposterous movies and exerted marked influence on women's styles, and on the illustrations, format, and textual matter of the smart set magazines. The main influence of surrealism, however, was on young and groping artists on one hand, and on the homeless, war-torn veterans on the other, artists who expressed their private agonies, frustrations, and nightmares—and all the floating debris of their sad, subconscious minds—by warping real things into strange symbols and semi-abstract decompositions.

Advertising art. The second tendency, the alliance between art and industry, was productive of extraordinary results, good and bad. For the first time on an extensive scale, artists of all persuasions lent their talents to the exploitation of merchandise and it was a common sight to see in the pages of popular magazines and in house organs, commercial paintings executed expressly for manufacturers of cigarettes, whisky, radio sets, airplanes, petroleum products, and pharmaceutical supplies. The artists engaged in such enterprises, for the most part, were nationally known exponents of vigorous realism, men like Thomas Benton, James Chapin, Adolf Dehn, Peter Hurd, Aaron Bohrod, and Paul Sample. The abstract, or left-wing painters, were employed as fantastic illustrators for fashion magazines and as designers of modernist interiors and decorations.

The reasons for the influx of artists into the field of advertising were purely economic. According to a survey made in 1946 by the Magazine of Art, the average annual income, per capita, of America's most reputable artists, from the sales of their paintings, was slightly more than \$1000, and rather than starve, the artists resorted to commercial jobs. That their trade ventures raised the level of advertising art is an open question, but the cheapening effect of trade practices on the work of the most estimable painters is a matter of common recognition. The most salutary effects of the union of art and industry were exemplified in the attitude of big corporations—the Pepsi-Cola Company, Abbott Laboratories, Encyclopaedia Britannica, and International Business Machines, to name the most prominent, which bought liberally of all kinds of American art, used their purchases occasionally for advertising purposes, and circulated their growing collections from coast to coast.

Competitions. The largest competition of the year, the third annual exhibition of the Pepsi-Cola Corporation, with \$15,000 in prize money, attracted painters of all denominations, the majority being left of center and the severely academic almost non-existent. First prize, \$2500, awarded to Boris Deutsch for a ghastly conception of atomic fury in the manner of Picasso's *Guernica*. Second prize, \$2000, to Lucio Lopez-Rey for a medieval bogey picture; third prize, \$1500, to Robert Gwathmey for a semi-abstract black *Madonna and Child*; fourth award, \$1000, to Abraham Rattner for a ghoulish piece of surrealism.

David Loew and Albert Lewin, self-conscious Hollywood aesthetes and producers, commissioned a dozen specialists in disintegration, among them Salvador Dali, Max Ernst, Ivan Lorraine Albright, Stanley Spencer, and Abraham Rattner, to paint the *Temptation of St. Anthony* for a setting to be used in a motion picture of Maupassant's *Bel Ami*. The prize award, \$3000, was captured by Ernst, European surrealist and expert in the realm of demented imagery.

The Carnegie Institute's annual affair, usually international in scope, was limited to 300 invited Americans, most of them competent, tepid and unoriginal. First prize, \$1000, to Karl Knaths for a conventional specimen of flat Cubism; second prize, \$700, to Jack Levine, a young artist of great promise; third prize, \$500, to William Gropper for a grotesque conception of Don Quixote.

Principal exhibitions. Knoedler & Company, famed international art dealers, celebrated their one hundredth anniversary with an historical showing in New York.

The Whitney Museum of New York, noted for its devotion to American art, offered, under the title, "Pioneers of Modern Art," canvases by Joseph Stella, Thomas Benton, Stuart Davis, Preston Dickinson, Max Weber and John Marin.

In London, early in the year, the first showing by Picasso since the war was greeted with sneers and snubs. The same paintings, shown later in New York, with other works by the School of Paris, were acclaimed as the cream and flower of modern art.

In London, a comprehensive exhibition of American paintings from Thomas Eakins to Thomas Benton was critically excoriated because it was too typically American, or in its modern aspects, too close to the French. In the United States, two exhibitions of British art, one of old portrait and landscape masters, the other of modernists, were extravagantly praised.

NEWS RECORD of 1946

Compiled by

THE NEW YORK HERALD TRIBUNE



JANUARY

IT WAS THE first New Year's Eve for six years on which men were not shooting at each other formally. So people wedged themselves tighter than ever into night spots. But the peace wasn't quite all we had hoped for. The world still had things to worry about—Russia—the peace treaty wrangles—that ghastly atom—the seeming feebleness of the a-borning United Nations. Strikes hobbled the United States—automobile, steel, electrical appliances, meat packing. We had expected to get those gadgets we love—washing machines, horseless carriages, mixing machines which pre-chew food. Also homes. But no. Not even men's white shirts or suits, for the moment.

- 1 William O'Dwyer, who came to America from Ireland in 1910 with \$23.85 in his pocket, inaugurated Mayor of New York City, succeeding Fiorello H. LaGuardia, who becomes radio commenorator.
- 1 Emperor Hirohito shocks Japan by saying he is not divine.
- 3 Truman blames Congress for blocking his program.
- 3 William Joyce ("Lord Haw-Haw" on German radio) is hanged in London as traitor.
- 5 Allies make public Hitler death documents; he expelled Goering and Himmler; married Eva Braun, 35.
- 7 American occupation troops hold mass demonstrations saying they "wanna go home"; demonstrations spread to India, Korea, Japan, Philippines, France, Germany.
- 10 U. S. Army hits the moon with radar impulses and catches them on the bounce.
- 10 General Assembly of the United Nations meets first time, in London; elects Paul Henri-Spaak, of Belgium, president.
- 10 Truce signed in China between Chiang Kai-shek's central government forces and Chinese Communists; General George C. Marshall is the mediator.

- 11 Long-distance phone service cut to dribble by strike in 26 states.
 - 14-16 Three-day general strike in Argentina in protest against dictatorship of Colonel Juan D. Péron.
 - 15 200,000 C. I. O. electrical workers go on strike, cutting off production of appliances.
 - 17 United Nations Security Council meets for first time, in London.
 - 18 Truman nominates Edwin W. Pauley, oil man and former Democratic party treasurer, as Undersecretary of the Navy.
 - 19 Iran (Persia) asks United Nations Security Council to help oust Soviet occupation troops.
 - 20 800,000 steel workers strike.
 - 20 General Charles de Gaulle resigns as President of France.
 - 21 Truman, in message on the state of the nation, asks Congress to act on twenty-six measures; is concerned about preventing inflation and subsequent depression.
 - 24 U. N. General Assembly creates Atomic Energy Commission.
 - 25 John L. Lewis and his United Mine Workers rejoin American Federation of Labor, which they had bolted in 1936.
 - 26 Government takes over meat-packing industry as 250,000 go on strike; unions tell men to work for government.
- DIED:** Harry Hopkins, 55; William T. Dewart, 36.

FEBRUARY

IN PITTSBURGH the heavens glowed again; the steel strike was over and America's factories greedily gobbled the ingots. General Motors, however, was still closed by its long strike. In Washington, political fireworks lit the heavens. Secretary of the Interior Ickes spoke out against Edwin W. Pauley, Truman's nominee for Undersecretary of the Navy. Ickes became a newspaper columnist instead of a Cabinet minister. People briskly bought Betty Mac-

Donald's "The Egg and I," a book destined to sell a million copies—which would, if laid side by side, reach from New York to Philadelphia, and be a lot more profitable than laying eggs. The Gallup Poll found President Truman popular with 63 percent of the people. (Remember this statistic in October.)

- 2 Ickes blasts Pauley as unfit to be Navy Undersecretary.
- 3 United Nations committee recommends permanent headquarters in New York-Connecticut border area. Residents of Greenwich protest.
- 6 Security Council rejects Russia's plea to investigate presence of British troops in Greece.
- 6 Truman urges U. S. to save food in order to prevent famine abroad.
- 7 House brushes aside Truman's plan for labor fact-finding boards and instead passes more drastic Case bill.
- 7 Soviet Ukraine charges before Security Council that British troops in Java menace peace; asks investigation.
- 7 Truman says he won't withdraw Pauley nomination.
- 9 Southern Democrats in Senate win three-week filibuster to block creation of Fair Employment Practices Commission.
- 0 Stalin announces new five-year plan for Russia.
- 2 Mayor shuts down New York for lack of fuel due to tugboat strike. Navy brings in coal.
- 2 State Department accuses Péron regime in Argentina of helping Nazis plot conquest in South America.
- 3 Security Council refuses to investigate British troops in Java.
- 3 Ickes, Secretary of the Interior for thirteen years, resigns in anger over Pauley affair.
- 4 United Nations chooses New York City as temporary headquarters.
- 5 Steel strike ends; men get increase President recommended—18½ cents an hour, setting pattern for wage rises.
- 8 Four American Archbishops become Cardinals.
- 8 James M. Curley, Mayor of Boston, sentenced to six months and \$1,000 fine in mail fraud.
- 0 Vassar gets woman president, first time in 85 years; Sarah Gibson Blanding.
- 1 Anti-Petrillo bill passed by House.
- 1 Anti-British rioting in Egypt, worst in decade.
- 4 Argentina elects Péron President.

28 France closes border with Spain in protest against totalitarian regime of Franco.

DIED: E. Phillips Oppenheim, 79; George Arliss, 77; Dr. Charles M. Sheldon, 89 (author of "In His Steps," which outsold every book but the Bible).

MARCH

DAPPER, DARK, DEAD-PAN, 38-year-old Andrei A. Gromyko stalked out of the United Nations Security Council meeting in New York. Was Russia pulling out of the United Nations? No, just a diplomatic war of nerves. Meanwhile, the United States was moving King Judah and tribe from their beloved Bikini Atoll. And Winston Churchill coined a phrase in a Missouri speech—"the iron curtain." Stalin said Churchill was a "firebrand of war." Here at home, domestic wars—Gloria Vanderbilt Stokowski served an ultimatum on her mamma; said she'd cut off mamma's \$21,000 yearly allowance; mamma could get a job. The four-month-old General Motors strike ended. Then coal miners walked out.

- 1 Bank of England goes under government ownership after 252 years of private operation.
- 4 England, France and U. S. publish documents showing Franco's collaboration with Axis, and call on the Spanish people to overthrow him.
- 6 Japan drafts new constitution abolishing army, navy, air forces forever, making war unconstitutional.
- 7 Sixty-five-day Western Electric strike settled.
- 9 Infra-red eye developed; shines ten miles.
- 10 Italians hold first free election since 1922.
- 12 Herbert H. Lehman resigns after three years as director of United Nations Relief and Rehabilitation Administration.
- 13 Four-month-old General Motors strike is settled; men get 18½ cents an hour more.
- 13 Soviet troops evacuate Mukden, on way out of Manchuria, stripping factories of machinery as they go.
- 13 Truman withdraws Pauley nomination after futile seven-week fight for Senate confirmation.
- 15 Attlee offers India full independence inside the Empire or outside.
- 25 Security Council begins second session, in New York City; Iran again appeals to get Russian troops out.

- 26 Government forbids construction of most types of business buildings so materials can go into homes for veterans.
 - 27 Soviet delegate, Gromyko, begins 13-day boycott of Security Council in protest against keeping Iran's complaint about Russia on the agenda.
 - 31 Greece holds first postwar election; Rightists win; leftists charge terrorism.
 - 31 John L. Lewis's 400,000 bituminous miners quit work, demanding higher pay and a union welfare fund contributed by employers.
- DIED:** Largo Caballero, 76; George Z. Medalie, 62; Philip Merivale, 59.

APRIL

SO WE HAD smashed Nazism and Fascism? Well, admirers of Benito Mussolini stole the dead, disintegrating Duce from the unmarked potter's grave in Milan which he had occupied just one year. And Russia, Poland and France, asked the United Nations to heave overboard Generalissimo Franco, the Axis-loving tyrant of Spain. The United States gave up trying to oust the Nazi-aping dictator of Argentina, President Perón, and sent him an ambassador. Democratic France decreed the death of legalized prostitution. Here at home we read "This Side of Innocence," a book about "tempestuous mating," which was destined to sell 1,267,000 copies, which if stacked up would make a pile more than sixteen miles high. The miners were still out fishing, so factories and stores had to close.

- 1 Republicans elect new national chairman: Brazilla Carroll Reece, Tennessee lawyer and former Congressman.
- 2 Government reports nation's civilian production at highest level ever reached —\$150,000,000,000 a year.
- 3 Firing squad executes Lt. Gen. Masaharu Homma, who ordered Bataan Death March.
- 4 Russia promises Iran to withdraw troops by May 6.
- 5 Iran agrees to give Russia oil rights; consents to semi-autonomy for northern province of Azerbaijan.
- 10 Poland asks Security Council to act against Franco regime in Spain, calling it threat to peace.
- 10 Japan holds first free parliamentary election since 1932; "Liberal" party (actually conservative) wins.

- 18 U. S. recognizes regime of Marshal Tito in Yugoslavia.
 - 18 League of Nations meets for last time in Geneva, to put itself out of existence.
 - 19 U. S. orders 25 percent reduction in American consumption of flour, to export more to starving Europe.
 - 20 Rival factions in China are fighting, despite truce; Chinese Communists capture Changchun from Chiang Kai-shek's troops.
 - 23 Security Council refuses, 8 to 3, to drop Iran case from agenda, as demanded by Russia.
 - 23 Manuel A. Roxas is elected President of the Philippines, defeating President Sergio Osmeña.
 - 25 Council of Foreign Ministers (Byrnes, Bevin, Molotov and Bidault) meets in Paris to draw up peace treaties for Italy, Rumania, Hungary, Bulgaria and Finland.
 - 29 U. S. proposes treaty with England, Russia and France to keep Germany disarmed twenty-five years, by force if necessary; Russia is cool.
 - 30 Anglo-American Committee of Inquiry recommends letting 100,000 Jewish refugees from Europe into Palestine promptly.
- DIED:** Lord Keynes, 62; Chief Justice Harlan Fiske Stone, 73; Vincent Youmans, 47; Noah Beery Sr., 63.

MAY

EUROPE lost another king (scarcely a good poker hand left) when little Victor Emmanuel bustled off to Egypt. America lost nearly half its flow of drinking alcohol, which bustled off in the form of grain to hungry Europe. We missed our trains in a big way when the railroad unions struck. What to do about these labor disputes? The President had one idea, Congress another, result: zero. In Detroit the painters' union picketed a man for painting his own home. A liberal play, "State of the Union," won the Pulitzer prize. And in the South the Ku Klux Klan began to bloom again. Stocks reached their peak for the four-year-old wartime bull market, then started gently sliding down. (See September and weep.)

- 1 Security Council opens investigation of Franco regime in Spain.
- 5 France votes to reject proposed postwar constitution, although it was favored by Communists, numerically largest party.

- 6 Russia fails to report to Security Council whether she withdrew troops from Iran, as promised. Iran says it can't get into Azerbaijan province to find out.
- 6 Council of Foreign Ministers deadlocked over Trieste. Russia backs Yugoslavia in demanding it. Western Allies back Italy in demanding it.
- 6 Russia drops claim to trusteeship over Italian Tripolitania in North Africa.
- 7 Britain promises to withdraw troops from Egypt; negotiations are under way for a new treaty.
- 9 King Victor Emmanuel III abdicates, hoping Italy's monarchy can be saved by his son, Humbert, who takes throne.
- 3 Congress passes 2,700,000-unit veterans' housing bill.
- 5 Council of Foreign Ministers in Paris fails to reach agreement on peace treaties and recesses.
- 5 Truman seizes railroads in face of strike threat.
- 6 British offer home-rule plan for India—a Hindu-Moslem federal union, with some autonomy for Moslems, but not independent status (Pakistan) which they demanded.
- 6 Shigeru Yoshida named Japanese Premier; Tokyo newspapers say he represents old prewar ruling clique.
- 0 Army plane crashes into Bank of Manhattan Building in New York, killing five aboard.
- 3 All U. S. railroads stop as unions go on strike.
- 4 Truman orders Army to run railroads if trains aren't moving tomorrow evening.
- 5 Truman calls special session of Congress; asks power to draft workers to run a government-seized industry. House immediately passes it, but not Senate (which rejected it on May 29).
- 5 Rail unions surrender; accept Truman terms—18½-cent hourly increase, which they dislike. Trains run.
- 6 Communists win overwhelmingly in Czechoslovakia election.
- 8-29 Twenty-eight Nazis, convicted of killing 300,000 persons in the Dachau concentration camp, walk up thirteen steps to the gallows at Landsberg, and are hanged by an American sergeant.
- 9 Congress passes Case bill, first piece of restrictive labor legislation in thirteen years; sixty-day cooling-off period required before strikes.
- 9 Coal strike over, after one-sixth of year's output lost. Miners get modified welfare fund; government operates mines because owners won't sign contract.

DIED: Booth Tarkington, 76; Joseph Medill Patterson, 67.

JUNE

CONGRESS and the President knocked out price control and Joe Louis knocked out Billy Conn. Soviet Russia shocked the Security Council by recklessly wielding her veto power three times in one afternoon. In Chicago the Army recovered a million and a half dollars' worth of jewels stolen by a colonel and his WAC wife (the Jack Durants) from the once-royal House of Hesse in Germany. In Chicago flames surged through the La Salle Hotel on the night of June 5th and burned up fifty-eight persons. In Chicago William Heirens, high school boy, confessed (A) having killed Frances Brown last December and written on her mirror: "For heaven's sake, catch me before I kill more." (B) Having killed six-year-old Suzanne Degnan and tossed her severed head in a sewer. And (C) having killed Mrs. Josephine Ross in her bedroom.

- 2 Italy votes to abolish monarchy. Christian Democrats (Catholic center party) win; Socialists second; Communists third.
- 2 French election demotes Communists to second place; puts Popular Republican Movement (Catholic center party) on top.
- 3 Twenty-seven Japanese war leaders go on trial in Tokyo, parallel Nuremberg trials.
- 6 John Wesley Snyder, old St. Louis banker friend of Truman's, is named Secretary of the Treasury.
- 6 Fred M. Vinson, whose father was a jailer in Kentucky, is appointed Chief Justice of the United States.
- 6 General Marshall arranges another truce, effective June 7, between Chiang Kai-shek's central government and the Chinese Communists.
- 10 Yugoslavs put on trial General Draja Mihailovitch, an Allied hero early in the war, for traitorous collaboration with Germans. American group protests, saying he is being persecuted for anti-Communism.
- 10 Justice Robert H. Jackson, in Nuremberg, issues unprecedented blast against his Supreme Court colleague, Justice Hugo L. Black, saying he sat in a case from which he might well have disqualified himself.

- 11 Truman vetoes Case Bill restricting strikes, saying it attacks symptoms rather than causes.
- 12 Bevin says England cannot put 100,000 Jews into Palestine right away, because Arabs would fight.
- 13 Congress passes price control bill, extending O. P. A., but full of loophole amendments.
- 14 United Nations Atomic Energy Commission meets first time; U. S. advocates international controls and abolition of Big Five veto power if some nation starts to develop atom for war use.
- 15 Council of Foreign Ministers meets again in Paris in fourth effort to agree on peace treaties.
- 19 Russia offers an atom control plan differing greatly from U. S. proposal.
- 19 Georges Bidault, former history teacher who headed resistance movement, elected provisional president of France.
- 20 Council of Foreign Ministers agrees to postpone for a year what to do with Italian colonies.
- 25 Congress passes nine-month draft extension to March 31, 1947.
- 26 Russia exercises veto three times in Security Council in regard to Spanish question, which is kept on the agenda.
- 28 Chester Bowles resigns as O. P. A. administrator, in protest against Congress bill which would "legalize inflation."
- 29 Truman vetoes price control bill, letting O. P. A. expire; but he hopes Congress will extend the present law. Congress does not; O. P. A. expires.
- 29 British arrest 2,718 Jews in Palestine, trying to round up terrorists.

DIED: William S. Hart, 81; Jack Johnson, 68; Mikhail I. Kalinin, 70; Senator John H. Bankhead, 73; Major Edward Bowes, 72.

JULY

IN FAR-AWAY Poland a mob slaughtered thirty-six Jews at Kielce, in the worst postwar pogrom. In the United States a mob of Southerners shot to death four Negro men and women (one a war veteran) at Monroe, Ga. Next door in Mississippi the voters renominated for the Senate Theodore G. Bilbo, who had urged red-blooded Mississippians to go to any lengths to keep Negroes from voting. In New York City, John S. Sumner, Executive Secretary of the Society for the Suppression of Vice, pantingly read "Memoirs of Hecate County," a new book by Edmund Wilson, and persuaded cops to raid bookshops.

In Paris the Big Four Council of Foreign Ministers failed to agree on peace treaties and recessed. In Pittsburgh, a note of cheer: Miss Norah Carpenter, of England, got married to the G.I. who had given her a surprise packet of quadruplets, three surviving.

- 1 Army B-29 bomber, Dave's Dream, drops atom bomb in first test at Bikini Atoll. Eleven outmoded ships are destroyed and twenty-five crippled. The animal toll is 15.3 percent.
- 2 Now that price controls are off, cows, pigs and sheep rush to market. Cattle prices set a record—\$22.50 a hundred-weight in Chicago.
- 3 Council of Foreign Ministers agrees to internationalize Trieste, making it a ward of the United Nations.
- 4 U. S. grants Philippines independence.
- 5-31 Thousands of Jews flee in terror from Poland into European countries, hoping to get to Palestine, after July 4 pogrom at Kielce.
- 7 Howard Hughes badly injured when his photographic plane crashes in test flight in California.
- 10 Molotov reveals Russia's plan for Germany—no federalization; strong central government; \$10 billion reparations to Russia.
- 10 Government estimates cost of basic commodities has risen 16 percent in two weeks; purchaser's dollar has shrunk to 84 cents.
- 12 Government orders all Lockheed Constellation planes to stay on ground; two of them caught fire in the air recently.
- 12 Council of Foreign Ministers recesses, still without agreement.
- 13 Congress approves \$3,750,000,000 loan to England; British plan to buy American machinery, food, movies.
- 15 Yugoslavia condemns General Mihailo vitch to be shot. He is executed two days later.
- 16 Isolationist Senator Burton K. Wheeler beaten for Democratic renomination in Montana after twenty-four years in Senate.
- 17 Eugene Talmadge, who based his campaign on white-supremacy issue, wins Democratic nomination for governor of Georgia, by unit vote but not by plurality.
- 19 Senate War Investigating Committee subpoenas Andrew J. May, chairman of House Military Affairs Committee, to explain why he did so many favors for Garsson munitions combine, and how he happened to cash checks from them. He promises to testify Friday. (Suffers heart attack; does not testify.)

- 10 Congressional Pearl Harbor investigating committee blames Admiral Kimmel and General Short (Pearl Harbor commanders) for negligence in Japan's sneak attack; also blames Washington top officers.
- 12 Jewish terrorists bomb King David Hotel in Jerusalem (British government headquarters), killing 71.
- 12 Last German prisoners of war leave Camp Shanks, New York.
- 5 Second atom bomb is tested at Bikini, exploded under water; battleship, aircraft carrier and eight other craft sent to the bottom.
- 5 O. P. A. is revived after lapse of twenty-five days as Congress passes new bill, which Truman signs "with reluctance" because of loopholes.
- 6 Congress passes bill putting U. S. atom control in hands of civilian board of five, instead of Army.
- 9 Twenty-one nations assemble in Paris to discuss peace treaties with Italy, Bulgaria, Rumania, Hungary and Finland. Treaties had been prepared by Big Four Council of Foreign Ministers, with some points still in dispute.
- 9 England accepts American proposal to merge our occupation zones in Germany economically; Russia and France decline merger.

DIED: Gertrude Stein, 72

AUGUST

THE SWOONERS swooned to "To Each His Own," which the radio sang at us; and the bookstores sold us "The Hucksters," which revealed that advertising men are only human, or almost. The Paris Peace Conference was so unpeaceful that Senator Tom Connally said, "They sit all day and go ya-ya-ya." At home the seventy-ninth Congress quit going ya-ya-ya and adjourned for the longest vacation in eight years. In Athens, Tenn., the H.I. Non-Partisan League whipped out its guns and chased all the local officials out of town, by way of ending political corruption with a bang. The phrase "Kilroy Was Here" bored us almost to its own extinction, but not quite yet.

- 1 Truman signs civilian atom-control bill.
- 2 Italian police find stolen body of Mussolini in a trunk hidden in a monastery near Milan.
- 2 British halt refugee ships bringing to Palestine European Jews who have no immigration permits; they are transhipped to detention in Cyprus.

- 13 Russia demands from Turkey a share in the military control of the Dardanelles.
 - 13 La Follette dynasty in Wisconsin is overthrown when Republicans fail to renominate Sen. Robert M. La Follette.
 - 19 Yugoslavs shoot down U. S. Army transport plane flying over a corner of Yugoslavia; all aboard die.
 - 20 U. S. sends stiff protest to Yugoslavia.
 - 29 Security Council votes to admit Sweden, Iceland and Afghanistan to U. N. membership. Russia vetoes applications from Eire, Portugal, Trans-Jordan; Council rejects applications from two Russian satellites: Albania and Outer Mongolia.
 - 29 Col. James Killian, who commanded U. S. Army jail in Litchfield, England, is convicted of cruel treatment of American soldier-prisoners; fined \$500.
 - 29 Russia demands that the Security Council find out how many troops England and the U. S. maintain in nations other than ex-enemies.
- DIED:** H. G. Wells, 79; James C. McReynolds, 84.

SEPTEMBER

THE PIGS and sheep and steers went on strike. Price ceilings went back on meat, meat vanished, butcher shops closed, we all became vegetarians like G. B. Shaw. President Truman fired Henry Wallace from the Cabinet for saying Secretary Byrnes was too tough with Russia. The stock market took the worst nosedive in sixteen years, wiping out an estimated \$9 billion of paper wealth. But the prices of things kept going up. By mid-month the value of the dollar had shrunk to 69 cents in terms of what it would buy. Housewives not only were frustrated for meat, but also scrambled for soap, sugar, salad oil.

- 1 Greece votes to bring back King George II, in exile in London since Germans overran Greece.
- 2 First all-Indian government inaugurated; Jawaharlal Nehru heads Cabinet.
- 4 Soviet Ukraine tells Security Council British troops in Greece menace world peace.
- 5 A. F. of L. seamen go on strike, tying up all U. S. ships.
- 8 Nine-year-old King Simeon II of Bulgaria loses his throne as nation votes to abolish monarchy.
- 8 British war veterans, unable to find houses, storm into empty luxury apartments in London.

- 10 Price ceilings restored on U. S. meat.
 - 13 Striking A. F. of L. seamen win wage demands, go to work.
 - 14 Seamen belonging to C. I. O. strike to get as much as A. F. of L. men; ships tied up.
 - 15 Shipping strike ends; wage demands are met.
 - 17 Soviet Russia reveals widespread purge of collective farm officials suspected of grafting.
 - 20 Truman fires Wallace from the Cabinet.
 - 20 Security Council rebuffs Russia, refusing to act against British troops in Greece.
 - 22 W. Averill Harriman succeeds Henry Wallace as Secretary of Commerce.
 - 24 Stalin says he sees no real danger of war with U. S. and Britain.
 - 28 Yugoslavia says it won't sign peace treaty with Italy as drawn up by Paris Conference, because it gives too much territory in Trieste area to Italy.
 - 30 Nineteen Nazi leaders found guilty at Nuremberg.
- DIED:** George Washington Hill, 61; Sir James Jeans, 69.

OCTOBER

THOSE STEERS that went on strike last month clogged the highways of the Mid West in their rush to get their necks under the slaughterhouse ax. In the absence of price control, steaks jumped to \$1.25 a pound; pork chops to \$1.00; hamburger to 69 cents. A \$100-a-week cashier embezzled almost a million dollars in ten months from his firm, the Mergenthaler Linotype Company. The Duke and Duchess of Windsor went back to England for the first time in seven years. They were welcomed five days later by thieves who climbed the drainpipe and eased off with \$80,000 worth of the Duchess's jewels. The Gallup Poll said 32 percent of the people approved President Truman's management.

- 1 Eleven Nazis sentenced to die by Nuremberg tribunal; seven sent to prison; three acquitted (Von Papen, Schacht, Fritzsche).
- 1 The Truculent Turtle, Navy plane, sets nonstop distance record, flying 11,236 miles from Perth, Australia, to Columbus, Ohio, in 55 hours, 15 minutes.
- 1 Shipping strike begins; deck officers walk out for more money.

- 4 Truman urges England to allow Jews to enter Palestine, regardless of Arab opposition.
- 6 Army B-29, Pacusan Dreamboat, lands in Cairo after flying over top of the world nonstop from Honolulu, 10,925 miles in 39 hours, 36 minutes.
- 11 Army cancels draft calls for the rest of the year.
- 12 Henry Wallace becomes editor of "The New Republic" magazine.
- 13 France adopts a new constitution, by narrow margin of 1,000,000 votes, despite De Gaulle's opposition.
- 14 Truman abolishes price control on meat; orders O. P. A. to speed decontrol generally.
- 15 Paris Peace Conference adjourns; disputed points will go back to Council of Foreign Ministers for final decision.
- 16 Goering kills himself with cyanide of potassium a few hours before ten other Nazis are executed at Nuremberg.
- 18 Byrnes says he is worried by "the continued if not increasing tension between us and the Soviet Union."
- 20 Berlin holds first municipal elections; Social Democrats win; Communists badly trounced.
- 21 Russia seizes thousands of skilled German workers, deporting them to Russia to work there.
- 21 First big airline strike begins; pilots quit on Trans World Airline, stranding passengers in Rome, Algiers, Ireland.
- 23 U. N. General Assembly opens in New York.
- 25 O. John Rogge is fired from Department of Justice for revealing prewar Nazi links of John L. Lewis, Burton K. Wheeler, and others.
- 28 Stalin denies Russia has atomic bomb.
- 28 Shipping strike ends on Atlantic and Gulf coasts; costliest in U. S. history.
- 28 Truman appoints David E. Lillienthal chairman of Atomic Energy Commission for U. S. Control.

DIED: General Joseph W. Stilwell, 63; Gifford Pinchot, 81; Barney Oldfield, 68.

NOVEMBER

THROUGHOUT the land in this election month there echoed the deadly two-word slogan of the Republicans: "Had Enough?" The people went to the polls and answered *yes*, and put Republicans in charge of both Houses of Congress for the first time since 1928. So this country moved toward conservatism while most of the rest of the world was moving in the opposite

direction. People suggested that President Truman resign and make room for a Republican President, but he was not interested. In Connecticut the traffic problem was licked by a homemade automobile which drove up to the airport, put on wings and flew away. In New York the Metropolitan Opera resumed with all its glitter, and one of the five fabulous bracelets on the right arm of Mrs. George Washington Kavanaugh flew away, despite the presence of her bodyguard; three days later this little \$5,000 bauble of platinum, diamonds and emeralds was returned by an honest housewife who had found it in the lobby on her way up to the topmost gallery. This country shed its wartime price controls, and whisky went up to about \$8 a bottle. Sugar reappeared, and meat; but jelly vanished from the marts. So did rice. A resourceful papa showered his daughter with Wheaties at her wedding. Editor Ralph Ingersoll vanished from the adless newspaper he had founded, New York's "PM", when owner Marshall Field decided he'd rather take in ads than shell out more millions. And at the end of the month, the nation's lights were dimmed, railroad traffic was cut down, factories began closing. For John L. Lewis and his 400,000 miners were on the warpath again. Judge Goldsborough ordered Lewis to call off his newest strike, but Lewis preferred to go on trial for contempt of court.

- 3 Emperor Hirohito promulgates Japan's new constitution, which forbids war forever.
- 4 Big Four Council of Foreign Ministers meets in New York, hoping to complete peace treaties for Italy, Hungary, Rumania, Bulgaria and Finland.
- 4 British disclose that Hindu-Moslem riots in India have cost 5,081 lives in the last four months.
- 5 Republican landslide overturns Democratic control of Senate and House.
- 6 Senator Fulbright, Arkansas Democrat, suggests Truman resign and let a Republican be President, so government won't be stalemated.
- 6 U. S. announces it will put Pacific islands wrested from Japan under United Nations trusteeship, on condition we are permitted to bar outsiders any time.
- 9 Truman ends all price and wage controls, except on rents, sugar and rice, effective Nov. 11.

- 10 France holds first election under new constitution; Communists become leading party.
- 12 Dutch end 15-month strife in Java by tentatively recognizing Indonesian Republic.
- 14 Victorious Republicans say they will cut income taxes 20 percent when new Congress meets in January.
- 15 Chinese National Assembly convenes to draw up new constitution. Chinese Communists boycott it and prepare to fight.
- 15 John L. Lewis gives signal for coal strike Nov. 21 in defiance of government operation of the mines.
- 17 C. I. O. announces that it will "resent and reject" Communist Party interference in union affairs.
- 18 Federal Judge Goldsborough issues restraining order telling John L. Lewis to retract his signal for mine strike.
- 20 Moslem League announces boycott of constitutional assembly to set up a free India; the League objects to Hindu predominance.
- 21 Soft coal miners strike. Lewis ignores court order.
- 22 Federal Court dismisses sedition case against twenty-six Americans who were put on trial, accused of pro-Nazism, in 1944.
- 24 Swiss flyers rescue twelve Americans marooned five days on an Alpine glacier after Army plane made forced landing.
- 24 First German state in U. S. occupation zone—Wuerttemberg-Baden—adopts a democratic constitution and flies the old black, red and gold flag of the pre-Hitler German Republic.
- 25 Railroad traffic is reduced and nationwide dimout is put into effect to save coal because of strike.
- 25 Students riot in Cairo, protesting proposed new treaty with England; they demand British withdraw at once.
- 26 Shipload of Jews, trying to enter Palestine without permits, battle British troops moving them to transports for deportation to Cyprus.
- 27 New York court rules Edmund Wilson's "Memoirs of Hecate County" an obscene book and fines publisher \$1,000; one of the three judges dissents.
- 27 United Nations General Assembly committee calls for census of all nations' armed forces at home and abroad by Jan. 1.
- 28 Georges Bidault resigns as Premier of France, so new legislature can elect a temporary successor.

- 28 Russia reverses stand and tells United Nations General Assembly it favors principle of international inspection system for control of armaments and atomic energy.
- 29 Judge Goldsborough puts John L. Lewis on trial for contempt of court for failing to call off coal strike.
- 29 Paul Porter resigns as Price Administrator; the agency will be liquidated, since few price controls remain.
- 30 British military court in Rome condemns to death two German generals responsible for massacring 335 Italian hostages during the war in the Ardeatine caves.

DIED: James J. Walker, 65; Henry Morgenthau Sr., 90.

DECEMBER

THE month began with the nation's most perturbing post-war labor dispute. John L. Lewis had his 400,000 miners twiddling their thumbs, while factories began closing, lights grew dim, trains stopped carrying freight except essentials. A Federal Judge ordered Lewis to send the miners back; he ignored the order. The judge fined the United Mine Workers \$3,500,000, Lewis, \$10,000 for contempt of court. As anger and pressure grew, Lewis dramatically called off the strike on its seventeenth day until April 1.

The international picture seemed to be clearing. After more than a year, the Big Four Council of Foreign Ministers agreed on treaties for Italy, Rumania, Hungary, Bulgaria and Finland. The Council agreed to draft the German Treaty in Moscow, beginning March 10. Sudden about-faces removed two of the biggest obstacles to armament reduction and atom control. Russia agreed to an international inspection system and once an inspection system was set up no nation should have power to veto its operations.

- 1 Miguel Alemán inaugurated President of Mexico. Friendly to the United States, he hopes for a loan. Bavaria and Greater Hesse adopt democratic constitutions.
- 2 Federal court in Chicago holds unconstitutional the Lea Act, passed to curb James Caesar Petrillo, president of the American Federation of Musicians. Britain and U. S. sign agreement for economic merger of American and British zones of occupation in Germany. U. S. proposes that the United Nations

call on the people of Spain to depose Generalissimo Franco.

- 3 Truman nominates O. Max Gardner as American Ambassador to the Court of St. James's. Wilson W. Wyatt, Housing Administrator, resigns. Oakland, Calif., is crippled by a general strike.
- 4 Greece demands U. N. investigate guerrilla warfare in northern Greece; accuses Yugoslavia, Rumania and Bulgaria of aiding rebels.
- 5 Council of Foreign Ministers completes peace treaties for Italy, Rumania, Hungary, Bulgaria and Finland.
- 7 Worst disaster of the year in U. S.—pre-dawn fire sweeps Winecoff Hotel in Atlanta, Ga., killing over 120. John L. Lewis calls off coal strike because of "public necessity."
- 8 U. N. Assembly asks Security Council to reduce use of big-power veto.
- 9 Council of Foreign Ministers agrees to meet March 10 in Moscow to draft peace treaties for Germany and Austria. The *Europa* sinks in a gale at Le Havre, and hits hulk of the *Paris*.
- 10 Iranian troops march into Azerbaijan, and fighting begins. U. N. E. S. C. O. ends first conference in Paris, with Julian Huxley as Director-General.

DIED: Walter Johnson, 59; Damon Runyon, 62; Leo S. Rowe, 75; Big Bill Dwyer, 63.

MAYBE every year is cock-eyed in this land of ours, but this one seemed cockier-eyed than usual. It set new records in strikes, songs, soaring prices. Four and a half million workers were involved in strikes. Three million phonograph records were sold. But just look at some of the prices—a ready-made shirt at Altman's, \$17.50; a couple of hair-brushes at Mark Cross, \$150; a nice round hamburger for lunch at a New York club, \$2.75. You got no bread with one meat ball; you tipped the bus-boy half a buck for your glass of water, the waiter a buck for bringing the hamburger, the maitre d'hôtel a buck or two for letting you eat in the joint. Saks-Fifth Avenue sold you a cigar for \$1.50, and kept it fresh until you were prepared to smoke it. There were omens that prices wouldn't stay quite so high. Seventeen days before Christmas people weren't shelling out the way they should. Altman's knocked down a bowl from \$395 to \$250; Jay Thorpe slashed a mink coat from \$10,000 to \$6,000. High on the best-seller list was a book by Joshua Loth Liebman entitled "Peace of Mind." Boy, did we need it!

Elections Abroad in 1946

IN 1946 there were strange contrasts in expressions of the popular will. Simeon II of Bulgaria was removed from his throne by a plebiscite whereas George II of Greece regained his throne the same way. Poland and Iran postponed scheduled elections beyond the year while the French went to the polls eight times. Some countries moved to the left, others to the right, still others remained in the center. Elections returns, not always complete, represent the latest available figures.

ARGENTINA.—Juan Domingo Perón was elected President for a six-year term, with an overwhelming majority in both houses of Congress. He received 1,474,444 popular votes and 304 electoral votes to José Tamborini's 707,359 popular and 72 electoral votes.

AUSTRIA.—On November 25, the Catholic People's party, a rightist group, won 84 seats in the National Assembly, whereas the Socialists won 76 and the Communists 5.

BELGIUM.—On February 17, the left wing group won control of the Chamber of Deputies when the Socialists won 69 seats, the Communists 24 and the Liberals 17, compared to the Christian Socialists 92. However, the Senate was won by the latter party with 54 seats to a combined 50 for the opposition. The Christian Socialists also won 344 of the 696 Councilships in the provincial elections. Thus, Belgium has a left wing Chamber of Deputies and a right wing Senate. The Cabinet under Huysmans, chosen Aug. 2, is composed of Socialists, Liberals and Communists.

BOLIVIA.—On July 22, an armed revolt by workers and students overthrew the government and resulted in the hanging of President Gualberto Villarroel from a lamp-post in La Paz. A provisional government was set up under Nestor Guillen. On August 16, Tomás Manje Gutiérrez became Acting President.

BULGARIA.—By plebiscite on September 8, 92 percent of the voters of Bulgaria voted to oust Simeon II and make Bulgaria a republic. On October 27, the Communist Fatherland Front, consisting of the Bulgarian Worker's party, the Agrarians, the National Union party, the Socialists and the Radicals, received 2,980,175 votes (54 percent of all cast) and gained 364 seats in the National Assembly. The remaining 601 seats were won by the Bulgarian Democrats, dissident Agrarians and Social Democrats, who together polled 1,230,960 votes. Communist Georgi Dimitrov became Premier on November 22.

CHINA.—China's first national Constitutional Assembly in nearly twelve years met at Nanking on November 15, to adopt a Constitution for the Chinese Republic and thus end one party rule. The Assembly, which was to be attended by 2050 delegates from all parties, opened with the Communists boycotting the meeting. The Youth party and the Social Democratic parties also failed to attend the opening.

CZECHOSLOVAKIA.—2,695,965 of the 7,067,356 votes cast went to the Communists on May 27, giving them 114 seats in the Assembly. A coalition of the Communists, Social Democrats and Slovakian Laborites controls 152 of the 300 seats. The 148 rightist representatives include National Socialists, People's party, Slovakian Democrats and Slovakian Freedom party.

ECUADOR.—The June 30 elections gave the Conservatives 33 seats in the Assembly, dissident Liberals 20, Independents 6, dissident Leftists 2, Democrats 1. Liberals, Socialists and Communists abstained from voting. On August 11, the Constituent Assembly, by a vote of 43 to 10, re-elected José María Velasco Ibarra as President.

FRANCE.—On May 5, by plebiscite, the French rejected a Communist-Socialist constitution. On October 13, they accepted a new constitution. This one creates a Chamber of Deputies with sole power of legislation, a Council of the Republic, and a President to be elected by the Assembly.

Election results were:

Party	Assembly seats	Votes
Popular Republicans	160	5,589,130
Communists	148	5,203,046
Socialists	120	4,198,110
Radical and Allied	59	2,179,067
Rightists	57	2,623,679
November 10—		
Communists	163	5,475,955
Popular Republicans	160	5,033,430
Socialists	93	3,454,080
Radical and Allied	59	1,975,660
Minor	99	3,136,630
To be elected (from colonies)	45	.....

GERMANY.—There were no national but many local elections in Germany in 1946. On May 27, thirty-eight cities in the United States Zone gave Christian Socialist Union 484 Council seats, Social Democrats 421, Communists 47 and Liberal Democrats 34. On September 1, the Socialist Unity (Communists and Socialists) won 56 percent of Saxony's municipal elections to 22 percent each for the Christian Democratic Union and Liberal Democrats in the Russian Zone. On October 13, the Christian Democrats gained control in the British Zone and in the French Zone.

The Berlin City Council elections resulted in defeat for the Russian-supported Socialist Unity party on October 20. The Social Democrats received 948,851 votes,

the Christian Democrats 432,016, the Socialist Unity 383,247 and the Liberal Democrats 181,835.

Bavaria, on December 2, elected 104 Christian Socialist delegates; Social Democrats won 54, Economic Reconstruction party 13, the Free Democratic 9, and Communists none.

GREECE.—As a result of the election of March 31, boycotted by the leftists, the Populists won 191 seats; the National Bloc, 56; Liberals, 42; Zervas, 17; Tourkavassilis, 8; Independents, 3.

On September 1, by 1,135,675 to 451,540, the Greeks restored George II as King.

HUNGARY.—By assembly vote on February 1, Hungary became a republic with Zoltan Tildy as President. On November 4, parliamentary elections resulted in the Small Holders party (Conservatives) receiving 60 percent of the vote, Communists and Socialists 25 percent together and the rest scattered among the Peasant, Democratic, Citizens and Radical parties.

ITALY.—The Court of Cassation announced, on June 18, the abolition of the monarchy because 12,717,923 people voted for a republic and only 10,719,284 for the retention of Humbert II. Constituent Assembly elections resulted as follows:

Christian Democrats, 207; Socialists, 115; Communists, 104; National Democratic Union, 44; Common Man, 30; Republicans, 23; National Freedom Bloc, 16; Action party, 7; minor parties, 13.

JAPAN.—As a result of the April 10th parliamentary elections, Conservatives, despite party names, won a complete victory. The Diet included 139 Liberals, 92 Social Democrats, 91 Progressives, 84 Independents, 38 minor party delegates, 16 Cooperatives, 5 Communists.

PHILIPPINE ISLANDS.—Manuel Acuna Roxas defeated Sergio Osmeña for the Presidency on April 29. Although Roxas had been accused of collaboration, Paul V. McNutt exonerated him on December 2.

RUMANIA.—In an election on November 19, whose fairness and freedom was questioned by the United States and Great Britain, the Communist-dominated National Democratic Front was voted into power, receiving 4,766,360 votes against the 879,927 for the nearest competitor, the National Peasant party. The vote gave the National Democratic Front 348 seats in Parliament to 32 for the National Peasant party, 29 for the Hungarian Peoples Union, 3 for the National Liberal party, and 2 for the Democratic Peasant party.

World War II Peace Treaty Obligations

The Big Four Foreign Ministers' Council on Dec. 5 set peace terms for satellite nations, to be signed in Paris in February. Terms for Germany and Austria will be fixed in Moscow in March.

ITALY.—Army, 250,000; navy, 22,500; air force, 25,000.

Reparations: \$100,000,000 to USSR; \$125,000,000 to Yugoslavia; \$105,000,000 to Greece; \$25,000,000 to Ethiopia; \$5,000,000 to Albania.

Territory Loss: All lands east of French line to Yugoslavia; Free Territory of Trieste; Adriatic islands to Yugoslavia; Briga and Tenda and small area north to France. All African colonies and Dodecanese Islands.

Compensation: 66⅔ percent of the value of Allied property damaged in Italy.

Demilitarization: 12 miles deep along French and Yugoslav borders; coastal region of Sardinia and Sicily; Pantelleria and neighboring islands.

RUMANIA.—Army, 120,000; navy, 5,000; air force, 8,000.

Reparations: \$300,000,000 to USSR.

Territory Loss: Bessarabia and part of Bukovina to USSR; southern Dobruja to Bulgaria.

Compensation: 66⅔ percent of the value of Allied property damaged in Rumania.

Free Navigation: Foreign ships on Danube treated equally as regards port charges and other costs.

BULGARIA.—Army, 55,000; navy, 3,500; air force, 5,200.

Reparations: \$45,000,000 to Greece; \$25,000,000 to Yugoslavia.

Territory Loss: None.

Demilitarization: Partial along Greek frontier.

Compensation: 66⅔ percent of the value of Allied property damaged in Bulgaria.

Free Navigation: Same as Rumania.

HUNGARY.—Army and navy of 65,000; air force of 5,000.

Reparations: \$200,000,000 to USSR; \$50,000,000 each to Czechoslovakia and Yugoslavia.

Territory Loss: A few towns south of the Danube to Czechoslovakia; return to Rumania of part of Transylvania.

Compensation: 66⅔ percent of the value of Allied property damaged in Hungary.

Free Navigation: Same as Rumania.

FINLAND.—Army, 34,400; navy, 4,500; air force, 3,000.

Reparations: \$300,000,000 to USSR.

Territory Loss: Petsamo to USSR; other territory mentioned in armistice.

Compensation: 66⅔ percent of the value of Allied property damaged in Finland.

THE ELECTION of 1946

by

ARTHUR M. SCHLESINGER, Jr.



THE Republican gains in the mid-term elections of 1946 represented primarily a widespread protest vote rather than a positive and clear mandate on questions of policy. The protest had its origins in the feeling that wartime controls had been maintained too long; in the dissatisfaction over the meat shortage of October, over the housing shortage, over the slow resumption of production and the scarcity of many desired consumers' goods; and in the misgivings created by the Truman-Wallace imbroglio over foreign policy. All these factors combined to create a broad and undiscriminating revulsion against the party in power and a strong desire for change.

The elections thus produced Republican majorities both in the House of Representatives and the Senate. This marks the fourth time since the Civil War that the opposition party has been in control of Congress. The other occasions were the 46th Congress (1879-81), when the Democrats were in control during the second half of Rutherford B. Hayes's presidency; the 54th Congress (1895-97), when the Republicans were in control during the second half of Grover Cleveland's second term; and the 72nd Congress (1931-33), when the Democrats were in effective control during the second half of Herbert Hoover's presidency (the Republicans retained a purely technical majority in the Senate). Each of these periods was marked by legislative stalemate and executive frustration.

In an effort to solve the difficulties created when one party controls the executive branch and the other the legislative, it has been suggested that President Truman resign, naming a Republican as Secretary of State and thus as his successor. This plan represents an attempt to adapt the British system of ministerial responsibility to the American political structure. In this particular form, it has no precedent in American history. Woodrow Wilson, if he had lost the election of 1916, had planned to make Charles Evans Hughes his successor immediately and thereby eliminate the delay (then four months) in the transfer of responsibility; and he seems later to have played with the idea of asking senators opposed to the League of

Nations to resign and run again as a test whether they or he represented public opinion more accurately. But the mid-term election of 1918, which amounted to a virtual vote of non-confidence, did not lead him to think along the lines of resignation.

The resignation plan, as first proposed, had the serious disadvantage of allowing the resigning president to appoint his successor and thus denying the people their proper role in the selection of the president. To meet this objection, some commentators have suggested the revival of the Act of 1792 which provides for a new election whenever the presidency becomes vacant, whether because of death or for other reasons, including resignation.

The Republican victory in 1946 also marks the end of the cycle of liberalism which has dominated the country since about 1930. It has been calculated that periods of conservatism and liberalism succeed each other at fairly regular intervals (though this may be expressed in terms of change of direction within a party as well as displacement of one party by the other). American political history falls roughly into the following such periods:

*1765-1787
1787-1801
*1801-1816
1816-1829
*1829-1841
1841-1861
*1861-1869
1869-1901
*1901-1918
1918-1931
*1931-1946

(see Arthur M. Schlesinger, "Tides of American Politics," *Yale Review*, xxix, 217-230, December, 1939).

The average length of each period is 16.6 years; and, omitting the atypical years between 1861-1901, the average length of each conservative period is 15 years, of each liberal period is 16.5 years. In view of the increased speed of modern life, of the expanded American involvement in world affairs and the ever-present possibility of economic depression, it is impossible to know to what extent these past tendencies will continue to hold good for the future.

*Leftward.

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1946 Election Results

Compiled by the N. Y. Herald Tribune

80TH CONGRESS (From Jan. 3, 1947) The Senate

(Necessary to majority—49)	
Republicans	51
Democrats	45
Progressive	0
Vacancies	0
Total	96

79TH CONGRESS (To Jan. 3, 1947) The Senate

Republicans	38
Democrats	55
Progressive	1
Vacancies	2
Total	96

House of Representatives

(Necessary to majority—218)	
Republicans	249
Democrats	185
Progressive	0
American Labor	1
Vacancies	0
Total	435

House of Representatives

Republicans	192
Democrats	236
Progressive	1
American Labor	1
Vacancies (Democratic)	5
Total	435

The Eightieth Congress The Senate

(The names in light-face type are the Senators whose terms do not expire until 1949 or 1951, as indicated by the dates after their names. The names in bold-face type are the Senators elected in 1946 to serve until 1953. The asterisk (*) denotes re-election in 1946. Party designation: D for Democratic; R for Republican.)

ALABAMA

Lister Hill (D) (1951)
John J. Sparkman (D)

ARIZONA

Carl Hayden* (D) (1951)
Ernest W. McFarland* (D)

ARKANSAS

John L. McClellan (D) (1949)
J. William Fulbright (D) (1951)

CALIFORNIA

Sheridan Downey (D) (1951)
William F. Knowland* (R)

COLORADO

Edwin C. Johnson (D) (1949)
Eugene D. Millikin (R) (1951)

CONNECTICUT

Brien McMahon (D) (1951)
Raymond E. Baldwin (R)

DELAWARE

C. Douglass Buck (R) (1949)
John J. Williams (R)

FLORIDA

Claude Pepper (D) (1951)
Spessard L. Holland (D)

GEORGIA

Walter F. George (D) (1951)
Richard B. Russell (D) (1949)

IDAHO

Glen H. Taylor (D) (1949)
Henry C. Dworshak (R)

ILLINOIS

Scott W. Lucas (D) (1951)
C. Wayland Brooks (R) (1949)

INDIANA

Homer E. Capehart (R) (1951)
William E. Jenner (R)

IOWA

George A. Wilson (R) (1949)
Bourke B. Hickenlooper (R) (1951)

KANSAS

Arthur Capper (R) (1949)
Clyde M. Reed (R) (1951)

KENTUCKY

Alben W. Barkley (D) (1951)
John S. Cooper (R)

LOUISIANA

John H. Overton (D) (1951)
Allen J. Ellender (D) (1949)

MAINE

Wallace H. White Jr. (R) (1949)
Owen Brewster* (R)

MARYLAND

Millard E. Tydings (D) (1951)
Herbert R. O'Connor (D)

MASSACHUSETTS

Leverett Saltonstall (R) (1949)
Henry Cabot Lodge Jr. (R)

MICHIGAN

Homer Ferguson (R) (1949)
Arthur H. Vandenberg* (R)

MINNESOTA

Joseph H. Ball (R) (1949)
Edward J. Thye (R)

MISSISSIPPI

James O. Eastland (D) (1949)
Theodore G. Bilbo* (D)

MISSOURI

Forrest C. Donnell (R) (1951)
James P. Kem (R)

MONTANA

James E. Murray (D) (1949)
Zales N. Ecton (R)

NEBRASKA

Kenneth S. Wherry (R)
(1949)
Hugh Butler* (R)

NEVADA

Patrick A. McCarran (D)
(1951)
George W. Malone (R)

NEW HAMPSHIRE

Styles Bridges (R) (1949)
Charles W. Tobey (R)

NEW JERSEY

Albert W. Hawkes (R)
(1949)
H. Alexander Smith* (R)

NEW MEXICO

Carl A. Hatch (D) (1949)
Dennis Chavez* (D)

NEW YORK

Robert F. Wagner (D)
(1951)
Irving M. Ives (R)

NORTH CAROLINA

William B. Umstead (D)
(1949)
Clyde R. Hoey (D) (1951)

NORTH DAKOTA

Milton R. Young (R) (1951)
William Langer* (R)

OHIO

Robert A. Taft (R) (1951)
John W. Bricker (R)

OKLAHOMA

Elmer Thomas (D) (1951)
Edward H. Moore (R)
(1949)

OREGON

Guy Cordon (R) (1949)
Wayne L. Morse (R) (1951)

PENNSYLVANIA

Francis J. Myers (D) (1951)
Edward Martin (R)

RHODE ISLAND

Theodore F. Green (D)
(1949)
J. Howard McGrath (D)

SOUTH CAROLINA

Burnet R. Maybank (D)
(1949)
Olin D. Johnston (D)
(1951)

SOUTH DAKOTA

Chan Gurney (R) (1951)
Harland J. Bushfield (R)
(1949)

TENNESSEE

Tom Stewart (D) (1949)
Kenneth McKellar* (D)

TEXAS

W. Lee O'Daniel (D) (1949)
Tom Connally* (D)

UTAH

Elbert D. Thomas (D)
(1951)
Arthur V. Watkins (R)

VERMONT

George D. Aiken (R) (1951)
Ralph E. Flanders (R)

VIRGINIA

A. Willis Robertson (D)
Harry F. Byrd* (D)

WASHINGTON

Warren G. Magnuson (D)
(1951)
Harry P. Cain (R)

WEST VIRGINIA

Chapman Revercomb (R)
(1949)
Harley M. Kilgore (D)

WISCONSIN

Alexander Wiley (R) (1951)
Joseph R. McCarthy (R)

WYOMING

Edward V. Robertson (R)
(1949)
Joseph C. O'Mahoney* (D)

The House of Representatives

(Party designations: D, Democrat; R, Republican; ALP, American Labor Party. The designation At-L., in place of Congressional District number, means At-Large. An asterisk (*) indicates re-election on Nov. 5, 1946; a dagger (†) indicates re-election [in Maine only] on Sept. 5, 1946.)

ALABAMA

1. *F. W. Boykin, D.
2. *G. M. Grant, D.
3. *G. W. Andrews, D.
4. *Sam Hobbs, D.
5. *Albert Rains, D.
6. *Pete Jarman, D.
7. *C. Manasco, D.
8. *J. J. Sparkman, D.
9. L. C. Battle, D.

ARIZONA

At-L. *R. F. Harless, D.
At-L. *J. R. Murdock, D.

ARKANSAS

1. *E. C. Gathings, D.
2. *W. D. Mills, D.
3. *J. W. Trimble, D.
4. *F. Cravens, D.
5. *Brooks Hays, D.
6. *W. F. Norrell, D.
7. *Oren Harris, D.

CALIFORNIA

1. *C. F. Lea, D.
2. *Clair Engle, D.
3. *J. L. Johnson, R.

CALIFORNIA—(cont.)

4. *F. R. Havenner, D.
5. *R. J. Welch, R.
6. *G. P. Miller, D.
7. John J. Allen Jr., R.
8. *J. Z. Anderson, R.
9. *B. W. Gearhart, R.
10. *A. J. Elliott, D.
11. E. K. Bramlett, R.
12. R. M. Nixon, R.
13. N. Poulson, R.
14. *Helen G. Douglas, D.
15. *G. L. McDonough, R.
16. D. L. Jackson, R.
17. *Cecil R. King, D.
18. W. W. Bradley, R.
19. *C. Holifield, D.
20. *C. Hinshaw, R.
21. *H. R. Sheppard, D.
22. *John Phillips, R.
23. C. K. Fletcher, R.

COLORADO

1. John Carroll, D.
2. *W. S. Hill, R.
3. *J. E. Chenoweth, R.
4. *R. F. Rockwell, R.

CONNECTICUT

1. W. J. Miller, R.
 2. H. Seely-Brown, R.
 3. E. B. Foote, R.
 4. John B. Lodge, R.
 5. J. T. Patterson, R.
- At-L. A. N. Sadlak, R.

DELAWARE

At-L. J. Calebe Boggs, R.

FLORIDA

1. *J. H. Peterson, D.
2. *E. H. Price, D.
3. *R. L. F. Sykes, D.
4. G. A. Smathers, D.
5. *J. Hendricks, D.
6. *D. L. Rogers, D.

GEORGIA

1. P. H. Preston, D.
2. *E. E. Cox, D.
3. *S. Pace, D.
4. *A. S. Camp, D.
5. James C. Davis, D.
6. *Carl Vinson, D.
7. H. Lanham, D.

The House of Representatives—(cont.)

GEORGIA—(cont.)

8. W. M. Wheeler, D.
9. *John S. Wood, D.
10. *Paul Brown, D.

IDAHO

1. Abe M. Goff, R.
2. John Sanborn, R.

ILLINOIS

1. *W. L. Dawson, D.
 2. Richard B. Vail, R.
 3. Fred E. Busbey, R.
 4. *M. Gorski, D.
 5. *A. J. Sabath, D.
 6. *T. J. O'Brien, D.
 7. T. L. Owens, R.
 8. *T. S. Gordon, D.
 9. R. J. Twyman, R.
 10. *R. E. Church, R.
 11. *C. W. Reed, R.
 12. *N. M. Mason, R.
 13. *Leo E. Allen, R.
 14. *A. J. Johnson, R.
 15. *R. B. Chipperfield, R.
 16. *E. M. Dirksen, R.
 17. *L. C. Arends, R.
 18. E. H. Jenison, R.
 19. *R. C. McMillen, R.
 20. *S. Simpson, R.
 21. *Evan Howell, R.
 22. *Melvin Price, D.
 23. *C. W. Vursell, R.
 24. *R. Clippinger, R.
 25. *C. W. Bishop, R.
- At-L. W. G. Stratton, R.

INDIANA

1. *R. J. Madden, D.
2. *C. A. Halleck, R.
3. *R. A. Grant, R.
4. *G. W. Gillie, R.
5. *F. A. Harness, R.
6. *N. J. Johnson, R.
7. *G. W. Landis, R.
8. E. A. Mitchell, R.
9. *Earl Wilson, R.
10. *R. S. Springer, R.
11. *Louis Ludlow, D.

IOWA

1. *T. E. Martin, R.
2. *H. O. Talle, R.
3. *J. W. Gwynne, R.
4. *K. M. LeCompte, R.
5. *P. Cunningham, R.
6. *J. I. Dolliver, R.
7. *Ben F. Jensen, R.
8. *C. B. Hoenes, R.

KANSAS

1. *A. M. Cole, R.
2. *E. P. Scrivner, R.
3. E. A. Meyer, R.
4. E. H. Rees, R.
5. *C. R. Hope, R.
6. Wint Smith, R.

KENTUCKY

1. *N. J. Gregory, D.
2. *E. C. Clements, D.
3. T. B. Morton, R.
4. *Frank L. Chelf, D.
5. *Brent Spence, D.
6. *V. Chapman, D.
7. W. H. Meade, R.
8. *Joe B. Bates, D.
9. *J. M. Robison, R.

LOUISIANA

1. *F. E. Hebert, D.
2. Hale Boggs, D.
3. *J. Domengeaux, D.
4. *O. Brooks, D.
5. O. E. Passman, D.
6. *J. H. Morrison, D.
7. *H. D. Larcade Jr., D.
8. *A. L. Allen, D.

MAINE

1. †Robert Hale, R.
2. †Margaret Smith, R.
3. †F. Fellows, R.

MARYLAND

1. E. T. Miller, R.
2. Hugh A. Meade, D.
3. *T. D'Alesandro, D.
4. *G. H. Fallon, D.
5. *L. G. Sasser, D.
6. *J. Glenn Beall, R.

MASSACHUSETTS

1. *J. W. Heselton, R.
2. *C. R. Clason, R.
3. *P. J. Philbin, D.
4. H. D. Donohue, D.
5. *Edith N. Rogers, R.
6. *G. J. Bates, R.
7. *T. J. Lane, D.
8. *A. L. Goodwin, R.
9. *C. L. Gifford, R.
10. *C. A. Herter, R.
11. J. F. Kennedy, D.
12. *J. W. McCormack, D.
13. *R. B. Wigglesworth, R.
14. *J. W. Martin Jr., R.

MICHIGAN

1. *G. G. Sadowski, D.
2. *E. C. Michener, R.
3. *P. W. Schafer, R.
4. *C. E. Hoffman, R.
5. *B. J. Jonkman, R.
6. *W. W. Blackney, R.
7. *J. P. Wolcott, R.
8. *F. L. Crawford, R.
9. *A. J. Engel, R.
10. *R. O. Woodruff, R.
11. *F. Bradley, R.
12. J. B. Bennett, R.
13. H. A. Coffin, R.
14. H. F. Youngblood, R.
15. *J. D. Dingell, D.
16. *J. Lesinski, D.
17. *G. A. Dondero, R.

MINNESOTA

1. *A. A. Andresen, R.
2. *J. P. O'Hara, R.
3. G. MacKinnon, R.
4. E. J. Devitt, R.
5. *W. H. Judd, R.
6. *H. Knutson, R.
7. *H. C. Anderson, R.
8. J. A. Blatnik, D.
9. *H. C. Hagen, R.

MISSISSIPPI

1. *J. E. Rankin, D.
2. *J. L. Whitten, D.
3. *W. M. Whittington, D.
4. T. G. Abernathy, D.
5. *A. Winstead, D.
6. *W. M. Colmer, D.
7. J. B. Williams, D.

MISSOURI

1. *Wat Arnold, R.
2. *M. Schwabe, R.
3. *W. C. Cole, R.
4. *C. J. Bell, D.
5. A. L. Reeves Jr., R.
6. *M. T. Bennett, R.
7. *Dewey Short, R.
8. P. M. Banta, R.
9. *C. Cannon, D.
10. *O. Zimmerman, D.
11. C. J. Bakewell, R.
12. *W. C. Ploeser, R.
13. F. M. Karsten, D.

MONTANA

1. *M. Mansfield, D.
2. *W. A. D'Ewart, R.

NEBRASKA

1. *C. T. Curtis, R.
2. *H. H. Buffett, R.
3. *Karl Stefan, R.
4. *A. L. Miller, R.

NEVADA

- At-L. C. H. Russell, R.

NEW HAMPSHIRE

1. *C. E. Merrow, R.
2. N. Cotton, R.

NEW JERSEY

1. *C. A. Wolverton, R.
2. *T. Millet Hand, R.
3. *J. C. Auchincloss, R.
4. *F. A. Mathews Jr., R.
5. *C. A. Eaton, R.
6. *C. P. Case, R.
7. *J. P. Thomas, R.
8. *G. Canfield, R.
9. *H. L. Towse, R.
10. *F. A. Hartley Jr., R.
11. *F. L. Sundstrom, R.
12. *R. W. Kean, R.
13. *Mary T. Norton, D.
14. *E. J. Hart, D.

NEW MEXICO

At-L. *A. M. Fernandez, D.
At-L. Earl Douglas, R.

NEW YORK

1. W. K. Macy, R.
2. *L. W. Hall, R
3. *H. J. Latham, R.
4. G. McMahon, R.
5. R. T. Ross, R.
6. Robt. Nodar Jr., R.
7. *John J. Delaney, D.
8. *J. L. Pfeifer, D.
9. *E. J. Keogh, D.
0. *A. L. Somers, D.
1. *J. J. Heffernan, D.
2. *J. J. Rooney, D.
3. *D. L. O'Toole, D.
4. *L. F. Rayfield, D.
5. *E. Celler, D.
6. *E. B. Buck, R.
7. F. R. Coudert Jr., R.
8. V. Marcantonio, ALP
9. *A. G. Klein, D.
0. *Sol Bloom, D.
1. J. K. Javits, R.
2. *A. C. Powell, D.
3. *W. A. Lynch, D.
4. *B. J. Rabin, D.
5. *C. A. Buckley, D.
6. David M. Potts, R.
7. *R. W. Gwinn, R.
8. *R. A. Gamble, R.
9. K. St. George, R.
0. *Jay LeFevre, R.
1. *B. W. Kearney, R.
2. *W. T. Byrne, D.
3. *D. P. Taylor, R.
4. *C. E. Kilburn, R.
5. *H. C. Fuller, R.
6. R. W. Riehlman, R.
7. *E. A. Hall, R.
8. *John Taber, R.
9. *W. S. Cole, R.
0. K. B. Keating, R.
1. *J. W. Wadsworth, R.
2. *W. G. Andrews, R.
3. *E. J. Elsaesser, R.
4. *J. C. Butler, R.
5. *D. A. Reed, R.

NORTH CAROLINA

1. *H. C. Bonner, D.
2. *John H. Kerr, D.
3. *G. A. Barden, D.
4. *H. D. Cooley, D.
5. *J. H. Folger, D.
6. *C. T. Durham, D.
7. *J. B. Clark, D.
8. C. B. Deane, D.
9. *R. L. Doughton, D.
0. *H. C. Jones, D.
1. *A. L. Bulwinkle, D.
2. M. M. Redden, D.

NORTH DAKOTA

t-L. *W. Lemke, R.
t-L. *C. R. Robertson, R.

OHIO

1. *C. H. Elston, R.
2. *William E. Hess, R.
3. R. H. Burke, R.
4. *Robt. F. Jones, R.
5. *C. Clevenger, R.
6. *E. O. McCowen, R.
7. *C. J. Brown, R.
8. *F. C. Smith, R.
9. *H. A. Ramey, R.
10. *T. A. Jenkins, R.
11. *W. E. Brehm, R.
12. *John M. Vorys, R.
13. *A. F. Weichel, R.
14. *Walter B. Huber, D.
15. *P. W. Griffiths, R.
16. H. H. Carson, R.
17. *J. H. McGregor, R.
18. *Earl R. Lewis, R.
19. *M. J. Kirwan, D.
20. *M. A. Feighan, D.
21. *Robt. Crosser, D.
22. *F. P. Bolton, R.
- At-L. *G. H. Bender, R.

OKLAHOMA

1. *G. R. Schwabe, R.
2. *W. G. Stigler, D.
3. Carl Albert, D.
4. G. D. Johnson, D.
5. *A. S. Monroney, D.
6. Toby Morris, D.
7. P. E. Peden, D.
8. *Ross Rizley, R.

OREGON

1. *W. Norblad, R.
2. *L. Stockman, R.
3. *H. D. Angell, R.
4. *H. Ellsworth, R.

PENNSYLVANIA

1. J. Gallagher, R.
2. R. N. McGarvey, R.
3. Hardie Scott, R.
4. F. J. Maloney, R.
5. G. W. Sarbacher Jr., R.
6. H. D. Scott Jr., R.
7. E. W. Chadwick, R.
8. *C. L. Gerlach, R.
9. Paul B. Dague, R.
10. J. P. Scoblick, R.
11. M. Jenkins, R.
12. *I. D. Fenton, R.
13. F. A. Muhlenberg, R.
14. *W. D. Gillette, R.
15. *R. F. Rich, R.
16. *S. K. McConnell Jr., R.
17. *R. M. Simpson, R.
18. *J. C. Kunkel, R.
19. *L. H. Gaven, R.
20. *F. E. Walter, D.
21. *C. H. Gross, R.
22. J. E. Van Zandt, R.
23. Wm. J. Crow, R.
24. *T. E. Morgan, D.
25. *L. E. Graham, R.

PENNSYLVANIA (cont.)

26. *H. Tibbott, R.
27. *A. B. Kelley, D.
28. C. D. Kearns, R.
29. J. McDowell, R.
30. *R. J. Corbett, R.
31. *J. G. Fulton, R.
32. *H. P. Eberharter, D.
33. *F. Buchanan, D.

RHODE ISLAND

1. *A. J. Forand, D.
2. *J. E. Fogarty, D.

SOUTH CAROLINA

1. *L. M. Rivers, D.
2. *John J. Riley, D.
3. W. J. B. Dorn, D.
4. *J. R. Bryson, D.
5. *J. P. Richards, D.
6. *J. L. McMillan, D.

SOUTH DAKOTA

1. *K. E. Mundt, R.
2. *Francis Case, R.

TENNESSEE

1. D. Phillips, R.
2. *J. Jennings Jr., R.
3. *E. Kefauver, D.
4. *Albert Gore, D.
5. Joe L. Evins, D.
6. *J. P. Priest, D.
7. *W. Courtney, D.
8. *Tom Murray, D.
9. *Jere Cooper, D.
10. *C. Davis, D.

TEXAS

1. *W. Patman, D.
2. *J. M. Combs, D.
3. *L. Beckworth, D.
4. *Sam Rayburn, D.
5. J. Frank Wilson, D.
6. *O. E. Teague, D.
7. *Tom Pickett, D.
8. *Albert Thomas, D.
9. *J. J. Mansfield, D.
10. *L. B. Johnson, D.
11. *W. R. Poage, D.
12. Wingate Lucas, D.
13. *Ed Gossett, D.
14. *John E. Lyle, D.
15. *M. H. West, D.
16. *R. E. Thomason, D.
17. *O. Burleson, D.
18. *E. Worley, D.
19. *G. H. Mahon, D.
20. *Paul J. Kilday, D.
21. *O. C. Fisher, D.

UTAH

1. *Walter K. Granger, D.
2. W. A. Dawson, R.

VERMONT

At-L. *C. A. Plumley, R.

The House of Representatives—(cont.)

VIRGINIA

1. *S. O. Bland, D.
2. P. Hardy Jr., D.
3. *J. V. Gary, D.
4. *P. H. Drewry, D.
5. T. B. Stanley, D.
6. *J. L. Almond Jr., D.
7. B. P. Harrison, D.
8. *H. W. Smith, D.
9. *J. Flannagan Jr., D.

WASHINGTON

1. Homer R. Jones, R.
2. *H. M. Jackson, D.

WASHINGTON—(cont.)

3. Fred Norman, R.
4. *Hal Holmes, R.
5. *Walt Horan, R.
6. T. C. Tollefson, R.

WEST VIRGINIA

1. Francis J. Love, R.
2. M. C. Snyder, R.
3. E. G. Rohrbough, R.
4. *Hubert S. Ellis, R.
5. *John Kee, D.
6. *E. H. Hedrick, D.

WISCONSIN

1. *L. H. Smith, R.
2. *R. K. Henry, R.
3. *W. H. Stevenson, I
4. John C. Brophy, R.
5. C. J. Kersten, R.
6. *Frank B. Keefe, R
7. *R. F. Murray, R.
8. *John W. Byrnes, I
9. *Merlin Hull, R.
10. *A. E. O'Konski, R

WYOMING

At-L. *F. A. Barrett, R.

1947 Governors of the States

The names in light-face type are the Governors whose terms did not expire last year. Names in bold-face type are Governors elected in 1946. Asterisk (*) denotes incumbent.

ALABAMA

James E. Folsom (D)

ARIZONA

*Sidney P. Osborn (D)

ARKANSAS

*Ben Laney (D)

CALIFORNIA

*Earl Warren (R)

COLORADO

William L. Knous (D)

CONNECTICUT

James L. McConaughy (R)

DELAWARE

Walter W. Bacon (R)

FLORIDA

Millard Caldwell (D)

GEORGIA

Eugene Talmadge (D)

IDAHO

Dr. C. A. Robins (R)

ILLINOIS

Dwight H. Green (R)

INDIANA

Ralph E. Gates (R)

IOWA

Robert D. Blue (R)

KANSAS

Frank Carlson (R)

KENTUCKY

Simeon Willis (R)

LOUISIANA

J. H. Davis (D)

MAINE

*Horace A. Hildreth (R)

MARYLAND

William P. Lane Jr. (D)

MASSACHUSETTS

Robert F. Bradford (R)

MICHIGAN

Kim Sigler (R)

MINNESOTA

Luther W. Youngdahl (R)

MISSISSIPPI

Fielding L. Wright (D)

MISSOURI

Phil Donnelly (D)

MONTANA

Samuel D. Ford (R)

NEBRASKA

Val Peterson (R)

NEVADA

*Vail Pittman (D)

NEW HAMPSHIRE

*Charles M. Dale (R)

NEW JERSEY

Alfred E. Driscoll (R)

NEW MEXICO

Thomas J. Mabry (D)

NEW YORK

*Thomas E. Dewey (R)

NORTH CAROLINA

R. Gregg Cherry (D)

NORTH DAKOTA

*Fred G. Aandahl (R)

OHIO

Thomas J. Herbert (R)

OKLAHOMA

Roy J. Turner (D)

OREGON

*Earl Snell (R)

PENNSYLVANIA

James H. Duff (R)

RHODE ISLAND

*John A. Pastore (D)

SOUTH CAROLINA

J. Strom Thurmond (D)

SOUTH DAKOTA

George T. Mickelson (D)

TENNESSEE

*Jim Nance McCord (D)

TEXAS

Beauford H. Jester (D)

UTAH

Herbert M. Maw (D)

VERMONT

Ernest W. Gibson (R)

VIRGINIA

William M. Tuck (D)

WASHINGTON

Mon C. Wallgren (D)

WEST VIRGINIA

Clarence W. Meadows (D)

WISCONSIN

*Walter S. Goodland (D)

WYOMING

*Lester C. Hunt (D)

THE UNITED STATES OF AMERICA



THE RISE OF THE UNITED STATES

by

PROFESSOR ARTHUR M. SCHLESINGER

Harvard University

Co-editor of "A History of American Life"



THE HISTORY OF POLITICAL PARTIES BIOGRAPHIES OF THE PRESIDENTS THE CABINETS

by

ARTHUR M. SCHLESINGER, JR.

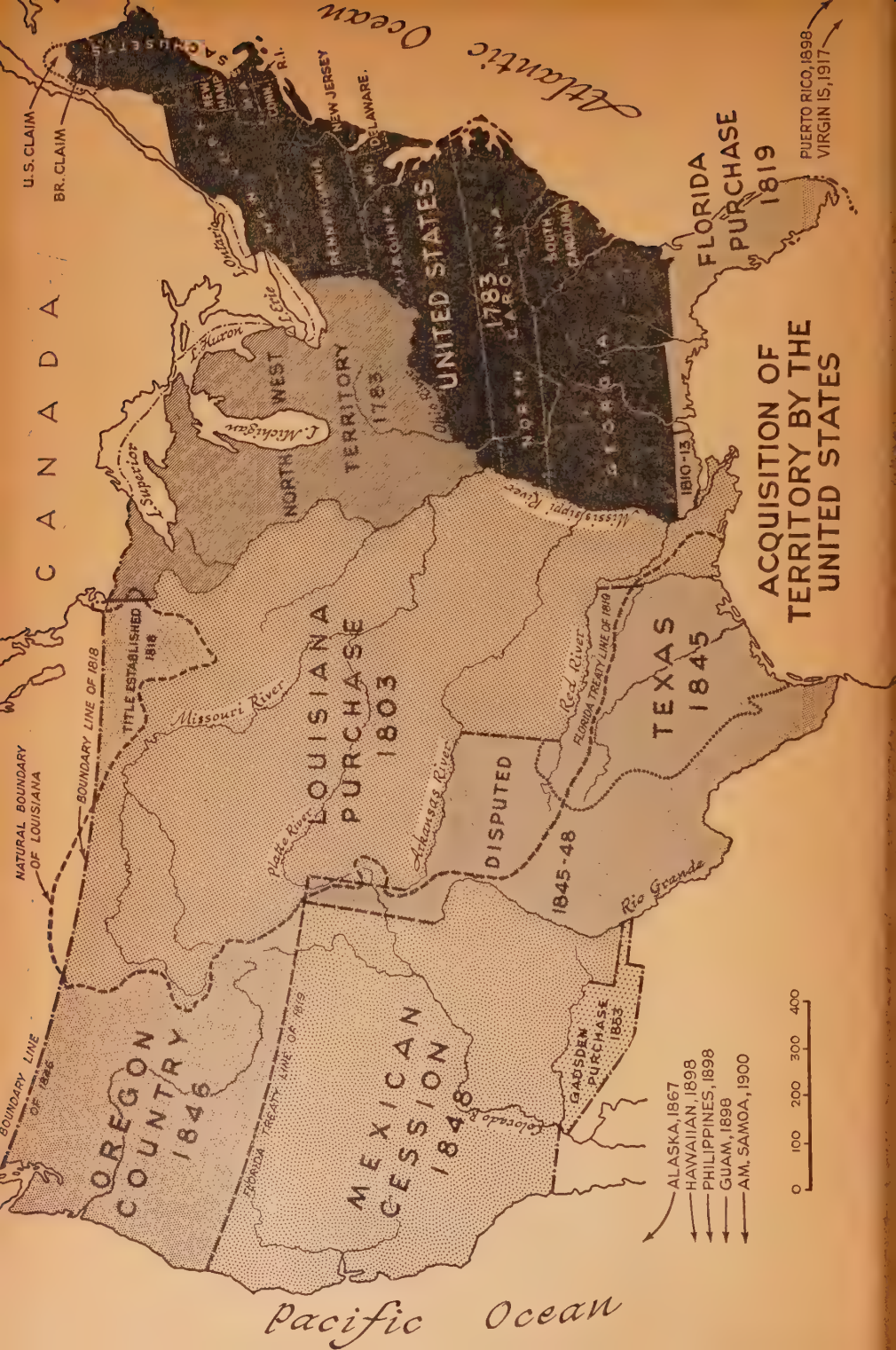
Associate Professor of History, Harvard University

Author of *The Age of Jackson*

1946 Pulitzer Prize winner in History



States and Territories, Presidential election tables and other pertinent national and state information compiled from official sources.



THE RISE OF THE UNITED STATES

BY ARTHUR M. SCHLESINGER, SR.

1. Under the English Flag

The land now comprehended within the United States once belonged to Spain, France, England, Holland and Sweden. Spain, colonizing from Mexico in the sixteenth and seventeenth centuries, expanded over most of the Gulf Coast, Texas and the border zone westward through California. France, moving down from Canada in the eighteenth century, annexed the Mississippi Valley from the Appalachians to the Rockies. Meanwhile, in the seventeenth century, the English began peopling the Atlantic shore, and finding the Dutch already established in the present New York and the Swedes in Delaware, seized their possessions. The so-called first Americans, the Indians, resisted the encroachments at their peril.

Notwithstanding this varied international background, United States history has been largely the product of influences emanating from the seaboard communities. Unlike the Spanish and French, the English regarded their colonies as genuine extensions of the homeland, and the settlers sowed English customs, institutions and speech so thoroughly that they eventually spread everywhere. True, the transplanted ways underwent modification, but this arose from necessities imposed by a wilderness existence and, as time went on, from a growing sense of self-sufficiency.

Organized settlement began in 1607 at Jamestown, where the first representative assembly was set up in 1619. The Pilgrims followed at Plymouth in 1620, spearheading a much larger migration of Puritans into New England. Later in the century the Quakers occupied a midway region owned by William Penn, making Philadelphia their headquarters and fanning out in every direction. By 1700 all the thirteen colonies existed but the southernmost, Georgia, which came into being in 1733. The settlers crossed the ocean to escape economic, religious and political oppression and to start anew in a land of greater opportunity.

In time, other strains reinforced the original English population: French Huguenots, Scotch Irish, Germans and minor groups, including the Dutch and Swedes already on hand. African slaves, first introduced at Jamestown in 1619, were welcomed in all the colonies, though the economic need for them was greater in the South, and the system took deeper root there than elsewhere. The people in the North engaged mainly in small farming, fishing and commerce, the Southerners largely in plantation production. Everywhere the colonists practiced self-government. When they clashed with the English-

appointed governors, they usually won out by withholding appropriations.

As the population penetrated farther inland, the settlers encountered the French guarding Canada and the eastern fringes of the Mississippi Valley. In a succession of wars (1689-1763), paralleling greater struggles between the parent nations abroad, France was finally ejected from North America and Britain's dominion extended to the Mississippi. Spain fell heir to the country west of the river, though some years later Napoleon was temporarily to reclaim it for France.

2. Birth of the Nation

With the removal of the Gallic menace the colonists felt less dependent upon the mother country militarily, and England's change from her former policy of "salutary neglect" aroused active resentment. A series of revenue measures, starting with the Sugar Act of 1764, provoked meetings of protest, nonimportation pacts and mob demonstrations in America. Colonial home rule was at stake, also freedom of trade, and the provincials appealed to the principle: "No taxation without representation." Parliament's action in 1774 penalizing all Massachusetts for the deed of a few in dumping dutied tea into Boston Harbor led to the first armed clash at Concord and Lexington on April 19, 1775; but a year and more passed before the patriots resolved upon the hazardous step of independence. The famous Declaration of July 4, 1776, penned by Thomas Jefferson for the Second Continental Congress, justified revolution as the only means to guarantee the "unalienable Rights" of "Life, Liberty and the pursuit of Happiness." Under George Washington as commander in chief the fighting shifted from New England into the middle states and then into the south. General Gates's victory at Saratoga on October 17, 1777, brought England's ancient enemy, France, into the war; just four years later the British yielded to the Allies at Yorktown. The Peace Treaty in 1783 recognized the United States as stretching to the Mississippi.

The infant, though born and baptized, had yet to be weaned. The league of states, formed under the Articles of Confederation in 1781, proved too weak either to deal effectively with foreign countries, or to raise necessary funds, or to ensure unrestricted domestic trade. Within the states, however, Revolutionary idealism prompted action to forbid primogeniture and tax-supported religions, and the Northern commonwealths abolished slavery, a prohibition which Congress's Ordinance of 1787 extended to the territory north of the Ohio. Feebleness of government, combined

with social disturbances culminating in Shays's Rebellion in Massachusetts, made sober men tremble for the sanctity of property rights and seemed to cloud the nation's future. The Federal Convention, summoned in 1787, designed a new framework after much wrangling between rival interests and sections.

The Constitution established a government of three separate and coordinate departments—legislative, executive and judicial—each endowed with adequate power, and each to serve as a check and balance on the others. Within its own sphere the general government was supreme, and it exerted its will not through state officials, as under the Articles of Confederation, but immediately upon individuals. Direct popular representation was limited to the House of Representatives, the Senate being chosen by the legislatures (a system which lasted till 1913), the President designated by Electors (who in practice, however, quickly lost their deliberative function), and the Supreme Court appointed by the President and Senate for life. Opposed in many states because of its centralizing and undemocratic features, the Constitution eventually won adoption on the assurance that a bill of rights would be added to preclude federal interference with civil liberties such as freedom of speech, the press and religion. The first ten amendments, in 1792, fulfilled the promise.

Perhaps no convention would have ratified the Constitution if it had been realized that an indivisible Union would ensue. The framers, engaged in the practical task of curing the defects of the Confederation government, strewed phrases through the document that had contradictory implications. On the basis of the text it was possible for equally honest men to maintain that the states were more powerful than the nation, or that the nation overtopped the states. At one time or other nearly every legislature, given what it considered sufficient provocation, asserted the right of nullification or secession. Short of such extreme doctrines, controversy began almost immediately over the question of whether the Constitution should be construed broadly to enhance the national authority or narrowly to lessen it.

Under George Washington, President from 1789 to 1797, the new government became a going concern. Congress, guided by Secretary of the Treasury Alexander Hamilton, buttressed the public credit by arranging to pay at par the national debt and the war-incurred state debts and by creating a United States Bank modeled upon the Bank of England. These measures, especially the last, alarmed Jefferson, veteran liberal and Washington's Secretary of State. Fearing that the legislation would build up a dangerous moneyed class, he urged a strict interpretation of the Con-

stitution in opposition to Hamilton's loose-construction views. The French Revolution widened the breach, for the Jeffersonian Democrats applauded as an upsurge of liberty what the Federalists dreaded as an irruption of chaos. But both men, knowing America's defenseless state, backed Washington's decision to maintain neutrality in France's war with England. Returned to power under John Adams, the Federalists in 1798, however, declared naval hostilities against France and passed the Alien Sedition Acts to muzzle opposition criticism. Though Adams, defying his party, prevented a full-scale war, he lost the election of 1800 to Jefferson. The Federalists never saw office again.

3. Democracy and Nationalism

The farming interest, which Jefferson deemed the bulwark of free government, had steadily increased since the Revolution. As settlers trekked inland, new states joined the original thirteen: Vermont, Kentucky and Tennessee in the 1790's, with Ohio and others shortly to follow. Pioneer life begot an intense individualism, fostered political and economic democracy, stimulated nationalism. In the South, by contrast, Eli Whitney's invention of the cotton gin in 1791 opened the way for plantation agriculture and Negro slavery to expand westward beyond the Mississippi. The growth of manufacturing in the Northeast introduced a third element into the scene. The rivalries of these sectional forces wove the principal strands of American history until the Civil War. Toward the mid-century the situation was further confused by the spread of manhood suffrage and a sudden mass immigration from Ireland and Germany.

Jefferson inaugurated the "Virginia Dynasty," his eight years giving way to two terms each of James Madison and James Monroe. He performed his greatest service by purchasing Louisiana from Napoleon in 1803, an act which, though violating his constitutional scruples, carried the flag to the Rockies and vastly enlarged the agricultural domain. With France and England again locked in conflict, depredations on American commerce gave constant provocation to war, but the peace-loving Jefferson applied economic sanctions in the form of an embargo keeping merchantmen at home. Such measures failed, however, and under Madison in 1812 Congress, goaded by the Warhawks, mostly Westerners, declared war on England. Unlike France, she had compounded her offenses by impressing American sailors and, moreover, lay exposed to land attack in Canada. But the assaults on Canada miscarried, and Britain's attempts at counter-invasion with veterans freed by Napoleon's defeat in 1814 fared little better.

Unhappily, Andrew Jackson's victory at New Orleans on January 8, 1815, occurred several weeks too late to affect the Peace Treaty of Ghent, which settled none of the prewar disputes.

Nevertheless the war experience greatly accelerated American nationalism. In 1816 Congress enacted the first protective tariff and chartered a new United States Bank on the model of Hamilton's. In 1819 the country acquired the Gulf region from Spain, who chose to sell rather than have it seized. In 1823 the President, prompted by successful revolutions in Latin America, proclaimed the Monroe Doctrine, warning Europe to keep hands off this new area of freedom.

Other events, however, prefigured growing sectional discord. Opposition to admitting Missouri as a slave state was ended in 1820 only by Congress's agreeing that the rest of the Louisiana Purchase north of the parallel marking her southern boundary should be free soil. Successive tariffs alienated Southerners as class legislation discriminating against their welfare. Touted by the astute South Carolinian, John C. Calhoun, they refurbished the doctrine of state rights as defensive armor. John Quincy Adams's administration (1825-1829) did nothing to improve conditions, and the advent of his successor, Jackson, precipitated a crisis.

Old Hickory, as indomitable in peace as in war, acted boldly against divisive tendencies, whether from the slavocracy or the money power. When South Carolina nullified the Tariff of 1832, he prepared for military action, whereupon the state accepted Congress's olive branch of a lower scale of duties. He smote financial privilege by destroying the Second United States Bank, which wielded monopolistic control over the nation's credit facilities. After eight years Jackson's lieutenant, Martin Van Buren, took over, but a business depression following the Panic of 1837 so discredited his administration that in 1840 the Whigs uproariously elected William Henry Harrison in the famous log-cabin campaign. He died after a month in office, however, and the Whigs fared hardly better with his unintended successor, John Tyler, whose strict-constructionist predilections foiled their plan to establish a third national bank.

Within the free states these years witnessed a ceaseless ferment of humanitarian agitation: crusades for public education, temperance, prison reform, labor's rights, women's rights. Humane people, viewing slavery as an anachronism and a sin, formed organizations to urge its abolition. The moderate-minded, content with demanding its exclusion from the territories, founded a series of unsuccessful parties, beginning with the election of 1840. The

South, frightened by these threats to its cherished institution, found little good in any of the movements and regarded the restless North with mounting apprehension.

4. Sectional Conflict

Western expansionist zeal plus the Southern desire for more slave territory elected James K. Polk over his Whig rival, Henry Clay, in 1844. When the outgoing Congress executed the Democratic pledge to annex Texas, Polk proceeded to high-pressure England into partitioning the jointly held Oregon country at the forty-ninth parallel, and in 1846, while that was still under way, contrived a war with Mexico to acquire California and the territory eastward to Texas. American forces quickly overran northern Mexico and California, but a fiercely contested march from Vera Cruz through the mountains to Mexico City proved necessary before Polk achieved his goal in the Treaty of Guadalupe Hidalgo early in 1848.

The conquests approximately completed the present continental boundaries. The immediate effect, however, was to arouse sectional dissension over the question of slavery in the new Southwest. Zachary Taylor, elected by the Whigs in 1848, died in office after sixteen months, leaving the crisis in the lap of Millard Fillmore. The Compromise of 1850, piloted through Congress by Henry Clay, admitted California as a free state, left slavery in Utah and New Mexico territories to future judicial determination, and disposed of other disputes. But the settlement soon turned into unsettlement, for Fillmore's Democratic successors, Franklin Pierce and James Buchanan, supported pro-Southern policies.

The Kansas-Nebraska Act of 1854, authorizing slavery by "popular sovereignty" in the country west of Missouri and Iowa, outraged Northerners as a base repudiation of the historic Missouri Compromise. Guerrilla warfare followed in Kansas, while in the free states the old-time antislavery elements joined with dissident Whigs and Democrats to organize the Republican party. The Republicans insisted that slavery be kept out of all federal territories. Angry contests on the floors of Congress operated like a war of nerves, convincing each side that the other was plotting its ruin. John Brown's insane attempt in 1859 to incite a servile insurrection merely poured oil on the flames. When the Republicans in 1860 elected Abraham Lincoln over a divided Democratic opposition, eleven slave states, appealing to state-rights principles, seceded and established the Confederate States of America.

For the hostilities that ensued, the North possessed the long-run advantage

of superior economic resources and man power, but before these could come into play, the South hoped to win by military prowess and perhaps by the intervention of England, which needed Southern cotton. England, however, never went quite so far, and the Southern authorities failed also to reckon with the inspired leadership of President Lincoln, who taught his people that the preservation of the Union involved not only their country's future but the democratic hope everywhere. While the North went about establishing a blockade by sea, the Confederates under Robert E. Lee brilliantly repulsed repeated land attacks on their capital, Richmond, and countered with battles on Northern soil at Antietam in 1862 and Gettysburg in 1863. But in the west they steadily lost ground until the Union forces late in 1864 swept around the southern tip of the mountains into Lee's rear and, by a pincers movement with Ulysses S. Grant before Richmond, brought final defeat the following April. As soon as military fortunes favored, Lincoln under his war powers proclaimed the emancipation of slaves in all unconquered states and districts, and the Thirteenth Amendment in 1865 universalized the decree. America at long last had caught up with the preamble of the Declaration of Independence.

Even prior to his re-election in 1864, Lincoln "with malice toward none" announced a plan to ease the return of the Southern states to their former place in the Union; but before much could be accomplished, his assassination on April 15, 1865, brought into office Andrew Johnson, who shared his views of reconstruction without his gifts of persuasion. Over Johnson's vetoes the Radical Republicans adopted a punitive program. They imposed military rule upon the South, impeached and almost ousted the President, and exacted ratification of the Fourteenth and Fifteenth Amendments before readmitting the last states in 1870. These amendments were designed to make the freedman a full-fledged citizen and voter. Even so, federal bayonets kept Northern-controlled Carpetbag governments in power for several years more.

5. Business and Government

Already the Republicans were changing from a humanitarian party to one of conservative business. The war gave an immense stimulus to economic life, speeding the construction of railways, the exploitation of minerals and other resources, the development of large-scale manufacturing, the accumulation of wealth, and bringing to the fore great captains of industry and finance, who naturally turned for favors to the dominant party. Despite economic depressions after the Panics of 1873 and

1893, this alliance of business and politics governed the country almost uninteruptedly for the rest of the century, putting successively into office Grant (for eight years), Rutherford B. Hayes, James A. Garfield, Chester A. Arthur (for Garfield's unexpired term), Benjamin Harrison and William McKinley (for two terms).

In the Hayes-Tilden election of 1876, however, the Republicans nearly came to grief, partly because of revelations of widespread graft in Grant's second administration, and partly because of disputed electoral returns from the surviving Carpetbag states. A special commission, created by Congress, decided for Hayes by a strictly partisan vote. The Democrats actually won eight years later, the voters preferring Grover Cleveland to James G. Blaine whom they suspected of political corruption. Cleveland, though defeated in 1888, triumphed again in 1892 largely because the Republicans had claimed too much for the beneficence of tariff protection. The Republicans avoided other disasters by harping upon Democratic disloyalty during the war ("waving the bloody shirt") and by catering to the Northern veterans' vote with generous pensions.

Conservative Republicanism met its principal difficulties in Congress, where the Western members, supported usually by Southern Democrats, uneasily resisted capitalistic domination. The Farther West, peopling rapidly after the war, gave a fresh dimension to the nation. Thanks to the attractions of precious minerals, cattle raising and free homesteads, this last frontier yielded steadily to settled communities, and between 1876 and 1896 eight additional states entered the Union. A new sectionalism emerged in politics, for Western needs and aspirations differed at many points from those of the East. The wage earners, too, feared the growing power of Big Business, but despite mounting numbers they lacked political representation and hence concentrated on trade-union methods, forming the American Federation of Labor in 1881. The two depression periods produced violent strikes and upheavals. Labor, however, prevailed upon Congress to place restraints on immigration in order to discourage competition by underpaid workers, especially from Southern and Central Europe.

Legislative struggles nearly always pivoted on issues affecting the new industrial order. The problem of greenback inflation, arising from the war, was finally settled to Eastern satisfaction by the Resumption Act of 1875. The drive for higher and yet higher protection succeeded with occasional setbacks until the Dingley Tariff in 1897 set a record. Congress under Western pressure took ineffective steps in 1887 and 1890 to regulate railways and business combinations, and it made some

early concessions also to the Western demand for free silver. During the Panic of 1893, however, Cleveland induced Congress to stop the inflation; and after the silverites, capturing the Democratic convention in 1896, failed to elect their nominee, William Jennings Bryan, the Republicans reduced silver to a minor coin and committed the country to the gold standard.

Foreign relations reflected similar tendencies, for the expanding industrial system demanded new markets, openings for investment and sources of raw materials. Cleveland withstood imperialistic sentiment, and in 1898 the McKinley administration intervened in the Cuban insurrection under the whip of popular anger at Spanish methods of repression and the explosion of the battleship *Maine* in Havana Harbor. Spain was quickly routed not only in the West Indies but also in her possessions off Asia. Though the "splendid little war" was prompted less by Wall Street than by a superheated sensational press, it bore fruit in the annexation of Puerto Rico, the Philippines and Guam, and brought businessmen further advantages through the quasi protectorate imposed on Cuba (later extended to other Caribbean countries). About the same time Hawaii and American Samoa were acquired, and Secretary of State John Hay's "open door" policy promised a growing trade with China. Theodore Roosevelt, raised to the presidency by McKinley's assassination in September, 1901, further advanced the cause by abetting a revolution against Colombia, thereby assuring the construction of the Panama Canal and much shorter distances within the colonial empire.

In domestic politics, however, Roosevelt aligned himself with the rising sentiment against business-dominated government, preaching with gusto the doctrine of the "square deal," and in his seven years breaking ground for later and more substantial advances. Despite party reactionaries he put teeth into the enforcement of the Antitrust Act of 1890, bullied Congress into tightening control over railroads and industrial monopolies, and initiated measures for conserving the nation's natural resources. William Howard Taft, his choice as successor, quietly pursued similar policies; but Taft's endorsement of the steep Payne-Aldrich Tariff together with other missteps so embittered the reformers that, failing to prevent his renomination in 1912, they organized the Progressive party to run their idol "Teddy" again. The Democrats, facing a divided opposition, elected their candidate, Woodrow Wilson.

Superbly endowed intellectually, and gifted with Jefferson's power to express democratic aspirations, Wilson proceeded with magisterial authority to climax the earlier efforts at reform. The Underwood

Tariff enacted the lowest rates since the Civil War; the Federal Reserve Act superseded an outworn national banking system; and the Clayton Act created the Federal Trade Commission to stop "unfair methods of competition." Two other measures, launched by popular demand during World War I, involved changes in the Constitution. The Eighteenth Amendment in 1920 enacted national prohibition, which ran its stormy course in thirteen years and required the Twenty-first for its undoing. The Nineteenth Amendment (1920) extended to all women the suffrage which some already possessed.

6. World War and After

With America a neutral in 1914 when the European struggle began, the administration's chief energies turned to the protection of maritime rights. Wilson and his countrymen, hating war and traditionally isolationist, only gradually perceived the threat to national security if a militaristic Germany should supplant Britain as mistress of the Atlantic; but Berlin's revival of ruthless submarine operations a few months after Wilson's second election clarified men's minds. Congress, stirred by his appeal that "The world must be made safe for democracy," declared war on April 6, 1917. The government, racing against time, swiftly put the nation on a battle footing, enacting universal conscription, taking over the railways, and regimenting industry, labor and agriculture. It was the country's introduction to total war. In the spring of 1918 Yankee troops under General John J. Pershing helped repulse a great German drive on the Marne and then, in July, shared in the mighty Meuse-Argonne counteroffensive, which ended the struggle on November 11.

At the Paris Peace Conference Wilson fought stubbornly for the democratic settlement he had earlier outlined under Fourteen Points, but gained principally his proposal of a League of Nations, which he saw as a sort of continuing peace conference. At home the Republican-controlled Senate, whipping up isolationist sentiment, completed his rout, for when Wilson spurned efforts to amend the treaty, that body under the two-thirds requirement rejected it by a minority vote. The tide was turning from wartime idealism to what Warren G. Harding, overwhelmingly elected by the Republicans in 1920, called "normalcy." Disclosures of corruption in high government circles hastened Harding's death, elevating Calvin Coolidge, who renewed his presidency by election a year later and was followed in 1929 by Herbert Hoover. All three, while keeping out of the League, nevertheless cooperated with some of its minor activities and, on their own, concluded a number of collective treaties

for temporary naval disarmament and the outlawry of war.

These part-way steps were offset, however, by an upsurge of economic nationalism: a skyward trend of protective duties, a relaxing of controls over giant corporations, and a quota limitation on European immigration. "Rugged individualism" produced the dizziest prosperity the country had ever known, only to collapse in 1929 into the worst depression ever known. Hoover, striving vainly to repair the damage, met abject defeat in 1932 at the hands of the socially minded Franklin D. Roosevelt, who pledged a "new deal" by the Democrats. Under Roosevelt's thrilling leadership Congress, casting precedent to the winds, voted billions for relief, "primed the pump" of business and agriculture to hasten recovery, and inaugurated long-range reforms to increase foreign trade through reciprocal tariff reductions, reorganize banking practices, safeguard trade-union activities, guarantee minimum wages, destroy electrical holding companies, and provide for social insurance and a government-planned development of the Tennessee Valley.

7. World War Again

Toward Latin America Franklin Roosevelt adopted the "good neighbor" policy, relinquishing the Caribbean protectorates and transforming the Monroe Doctrine into a mutual nonaggression pact. As further evidence of the retreat from imperialism, Congress made provision for Philippine freedom in 1946. Relations with other parts of the world, however, posed increasing problems. As the Axis dictators and their Oriental partner, Japan, began over-running weaker peoples, Congress under isolationist influences directed Roosevelt, against his wish, to embargo munition sales to both victim and assailant; but public opinion forced a lifting of the ban after England and France in September, 1939, took up arms against Nazi aggression. Hitler's subjugation of France the following June emboldened Roosevelt to more active steps, for crippled England now alone defended the Atlantic from totalitarian domination. Congress at his behest voted vast sums for rearmament and adopted peacetime conscription, and Roosevelt, without consulting Congress, gave England fifty destroyers in exchange for a string of naval bases off North America.

Isolationists, mostly Republicans, denounced Roosevelt's "warmongering," while he, still clinging to measures "short of war," stressed insistently the gathering dangers to the American way of life—to freedom of speech, freedom of worship, freedom from want and freedom from fear. The people responded by choosing him in 1940 as their first third-term President. In March, 1941, he secured adoption of the

lend-lease plan and soon began using the navy to safeguard the supplies en route. Before matters reached a crisis, the Japanese war lords, irked by America's stiffening attitude toward their own conquests and gambling upon an Axis victory in Europe, treacherously attacked Pearl Harbor on December 7, clearing the way for the seizure of Guam, the Philippines and two of the Aleutians, as well as many Dutch and British holdings. Within four days Germany and Italy declared war against the United States.

America quickly girded herself for the mightiest struggle in history. Enlarging upon Wilson's wartime methods, the government completely reorganized the national economy for an unparalleled output of arms and food. By summer, sea, land and air forces were attacking the enemy all over the globe. In May, 1943, after bitter fighting, Anglo-American armies expelled the Axis from North Africa, then invaded southern Italy and forced the government's submission in September, though the Nazis there kept up the fight. Landing in Normandy in June, 1944, the Allies under Dwight D. Eisenhower's supreme command battered their way through France and across the Rhine, while the Russians pounded the Nazis from the east. On May 8, 1945, Germany unconditionally surrendered. The Pacific war was no less desperately contested; but the Allies, based on Australia, slowly won control of the sea and, pressing onward from island to island, hastened Japan's unconditional surrender on August 14, 1945, by loosing the atomic bomb and by Soviet Russia's last-minute entry into the conflict.

World War II was at an end, but what would be the nature of the peace? The Atlantic Charter, signed in August, 1941, by Roosevelt and Churchill and later agreed to by all the Allies, pledged them against "aggrandizement, territorial or other," but subsequent conferences by the major powers—at Cairo, Teheran, Yalta, Potsdam and elsewhere—foreshadowed a different outcome. Russia in particular demanded substantial territorial advantages. In July, 1946, the Allies gathered at Paris to draw up terms for Italy and the Axis satellites: Rumania, Bulgaria, Hungary and Finland. Germany and Japan, under armed occupation, were reserved for later handling.

Without waiting for final military victory fifty countries, at Roosevelt's urging and with bipartisan support in America, had set up a successor to the League: the peacetime United Nations. Roosevelt, elected a fourth time in 1944, died suddenly on April 12, 1945, several weeks too soon to assist in framing the charter at San Francisco; but his achievements in peace and war had already earned him a niche alongside America's greatest Presi-

dents: Washington, Jefferson, Jackson, Lincoln and Wilson.

His successor, Harry S. Truman, gained Congress's backing for measures implementing the international organization, such as the Bretton Woods agreements and the new World Court, but his proposals for domestic reconversion ran into stiff and usually successful opposition from a coalition of Northern Republicans and Southern Democrats. Legislation was

passed, however, for emergency housing of veterans, modified price control and a program of hospital construction. As climbing prices attended the quick relaxation of wartime controls, industrial unrest flared up throughout the land. The strikes usually concluded with higher wage scales negotiated by the government. When the year 1946 closed, there remained much unfinished business both at home and abroad.

The Continental Congresses

The First Continental Congress called by Massachusetts and Virginia in 1774 was attended by representatives of all the colonies except Georgia. Patrick Henry of Virginia declared, "The distinctions between Pennsylvanians, New Yorkers and New Englanders are no more. I am not a Virginian but an American." This Congress was in session only two months but passed inter-colonial resolutions calling for extensive boycott by the colonies against British trade.

The following year most of the delegates from the colonies were chosen by popular election to attend the Second Continental Congress which indicated the reality of the thirteen-colony alliance. The Congress assembled at Philadelphia on September 5, 1775, a few months after war had actually begun between the colonies and England. The Declaration of Independence, penned by Thomas Jefferson and signed by most of the delegates in 1776, came a year

after the first battle of the Revolutionary War at Lexington, April 19, 1775.

The Second Continental Congress recruited an army to resist the British and appointed George Washington as commander-in-chief. On July 4, 1776, the colonies declared their independence from the British and in the absence of unilateral organization, managed to unite the resistance of the colonies until the Articles of Confederation were signed in 1781. The Articles provided more for a league of the thirteen states rather than central government. Each state had certain powers and allowed like power in less degree to the federal government.

The United States was internationally recognized as an independent government when the Peace Treaty in 1783 recognized the United States as a nation bordered by Canada on the north, the Atlantic Ocean on the east, Spanish-owned Florida on the south and the Mississippi River on the west.

Presidents of the Continental Congresses

Name	Elected	Born	Died
Peyton Randolph, Va.	Sept. 5, 1774	1723	1775
Henry Middleton, S. C.	Oct. 22, 1774	....	....
Peyton Randolph, Va.	May. 10, 1775	1723	1775
John Hancock, Mass.	May 24, 1775	1737	1793
Henry Laurens, S. C.	Nov. 1, 1777	1724	1792
John Jay, N. Y.	Dec. 10, 1778	1745	1829
Samuel Huntington, Conn.	Sept. 28, 1779	1732	1796
Thomas McKean, Pa.	July 10, 1781	1734	1817
John Hanson, Md.	Nov. 5, 1781	....	1783
Elias Boudinot, N. J.	Nov. 4, 1782	1740	1821
Thomas Mifflin, Pa.	Nov. 3, 1783	1744	1800
Richard Henry Lee, Va.	Nov. 30, 1784	1732	1794
John Hancock, Mass.	Nov. 23, 1785	1737	1793
Nathaniel Gorham, Mass.	June 6, 1786	1738	1796
Arthur St. Clair, Pa.	Feb. 2, 1787	1735	1818
Cyrus Griffin, Va.	Jan. 22, 1788	1748	1810

THE DECLARATION OF INDEPENDENCE IN CONGRESS, JULY 4, 1776

The unanimous DECLARATION of the thirteen united STATES OF AMERICA.

WHEN, in the course of human events, it becomes necessary for one people to dissolve the political bands which have connected them with another, and to assume, among the powers of the earth, the separate and equal station to which the laws of nature and of nature's God entitle them, a decent respect to the opinions of mankind requires that they should declare the causes which impel them to the separation.

We hold these truths to be self-evident that all men are created equal, that they are endowed, by their Creator, with certain unalienable rights, that among these are life, liberty, and the pursuit of happiness. That to secure these rights, governments are instituted among men, deriving their just powers from the consent of the governed, that whenever any form of government becomes destructive of these ends, it is the right of the people to alter or to abolish it, and institute new government, laying its foundation on such principles, and organizing its powers in such form as to them shall seem most likely to effect their safety and happiness. Prudence, indeed, will dictate that governments long established, should not be changed for light and transient causes; and accordingly all experience hath shown that mankind are more disposed to suffer, while evils are sufferable, than to right themselves by abolishing the forms to which they are accustomed. But when a long train of abuses and usurpations, pursuing invariably the same object, evinces a design to reduce them under absolute despotism, it is their right, it is their duty, to throw off such government, and to provide new guards for their future security. Such has been the patient sufferance of these Colonies, and such is now the necessity which constrains them to alter their former systems of government. The history of the present King of Great Britain is a history of repeated injuries and usurpations, all having in direct object the establishment of an absolute tyranny over these States. To prove this, let facts be submitted to a candid world.

He has refused his assent to laws, the most wholesome and necessary for the public good.

He has forbidden his governors to pass laws of immediate and pressing importance, unless suspended in their operation till his assent should be obtained; and when so suspended, he has utterly neglected to attend to them.

He has refused to pass other laws for the accommodation of large districts of people, unless those people would relinquish the right of representation in the legislature, a right inestimable to them, and formidable to tyrants only.

He has called together legislative bodies at places unusual, uncomfortable, and distant from the depository of their public records, for the sole purpose of fatiguing them into compliance with his measures.

He has dissolved representative houses repeatedly, for opposing with manly firmness his invasions on the rights of the people.

He has refused for a long time, after such dissolutions, to cause others to be elected, whereby the legislative powers, incapable of annihilation, have returned to the people at large for their exercise; the State remaining, in the meantime, exposed to all the dangers of invasion from without, and convulsions within.

He has endeavored to prevent the population of these States; for that purpose obstructing the laws for naturalization of foreigners; refusing to pass others to encourage their migrations hither, and raising the conditions of new appropriations of lands.

He has obstructed the administration of justice by refusing his assent to laws for establishing judiciary powers.

He has made judges dependent on his will alone, for the tenure of their offices, and the amount and payment of their salaries.

He has erected a multitude of new offices, and sent hither swarms of officers to harass our people, and eat out their substance.

He has kept among us, in times of peace, standing armies, without the consent of our legislatures.

He has affected to render the military independent of and superior to the civil power.

He has combined with others to subject us to a jurisdiction foreign to our constitution and unacknowledged by our laws; giving his assent to their acts of pretended legislation:

For quartering large bodies of armed troops among us:

For protecting them, by a mock trial, from punishment for any murders which they should commit on the inhabitants of these States:

For cutting off our trade with all parts of the world:

For imposing taxes on us without our consent:

For depriving us, in many cases, of the benefits of trial by jury:

For transporting us beyond seas to be tried for pretended offenses:

For abolishing the free system of English laws in a neighboring province, establishing therein an arbitrary government, and enlarging its boundaries, so as to render it at once an example and fit instrument for introducing the same absolute rule into these colonies:

For taking away our charters, abolishing our most valuable laws, and altering fundamentally the forms of our governments:

For suspending our own legislatures, and declaring themselves invested with power to legislate for us in all cases whatsoever.

He has abdicated government here, by declaring us out of his protection, and waging war against us.

He has plundered our seas, ravaged our coasts, burnt our towns, and destroyed the lives of our people.

He is, at this time, transporting large armies of foreign mercenaries to complete the works of death, desolation, and tyranny, already begun, with circumstances of cruelty and perfidy, scarcely paralleled in the most barbarous ages, and totally unworthy the head of a civilized nation.

He has constrained our fellow citizens, taken captive on the high seas, to bear arms against their country, to become the executioners of their friends and brethren, or to fall themselves by their hands.

He has excited domestic insurrections amongst us, and has endeavored to bring on the inhabitants of our frontiers, the merciless Indian savages, whose known rule of warfare is an undistinguished destruction of all ages, sexes, and conditions.

In every stage of these oppressions we have petitioned for redress in the most humble terms: our repeated petitions have been answered only by repeated injury. A prince whose character is thus marked by every act which may define a tyrant, is unfit to be the ruler of a free people.

Nor have we been wanting in attentions to our British brethren. We have warned them, from time to time, of attempts by their legislature to extend an unwarrantable jurisdiction over us. We have reminded them of the circumstances of our emigration and settlement here. We have appealed to their native justice and magnanimity, and we have conjured them by the ties of our common kindred to disavow these usurpations, which would inevitably interrupt our connections and correspondence. They too have been deaf to the voice of justice and of consanguinity. We must, therefore, acquiesce in the necessity which denounces our separation, and hold them, as we hold the rest of mankind, enemies in war, in peace friends.

WE, therefore, the Representatives of the United States of America, in General Congress assembled, appealing to the Supreme Judge of the world for the rectitude of our intentions, do in the name, and by authority of the good people of these Colonies, solemnly publish and declare, That these United Colonies, are, and of right ought to be, *free and independent States*; that they are absolved from all allegiance to the British crown, and that all political connexion between them and the State of Great Britain, is, and ought to be, totally dissolved; and that as *free and independent States*, they have full power to levy war, conclude

peace, contract alliances, establish commerce, and to do all other acts and things which *independent States* may of right do. And for the support of this declaration, with a firm reliance on the protection of Divine Providence, we mutually pledge to each other our lives, our fortunes, and our sacred honour.

JOHN HANCOCK.

New Hampshire.

Josiah Bartlett,
Wm. Whipple,
Matthew Thornton.

Rhode Island.

Step. Hopkins,
William Ellery.

Connecticut.

Roger Sherman,
Sam'l Huntington,
Wm. Williams,
Oliver Wolcott.

New York.

Wm. Floyd,
Phil Livingston,
Frans. Lewis,
Lewis Morris.

New Jersey.

Richd. Stockton,
Jno. Witherspoon,
Fras. Hopkinson,
John Hart,
Abra. Clark.

Pennsylvania.

Robt. Morris,
Benjamin Rush,
Benja. Franklin,
John Morton,
Geo. Clymer,
Jas. Smith,
Geo. Taylor,
James Wilson,
Geo. Ross.

Massachusetts Bay.

Saml. Adams,
John Adams,
Robt. Treat Paine,
Elbridge Gerry.

Delaware.

Caesar Rodney,
Geo. Read,
Thos. M'Kean.

Maryland.

Samuel Chase,
Wm. Paca,
Thos. Stone,
Charles Carroll of Carrollton.

Virginia.

George Wythe,
Richard Henry Lee,
Th. Jefferson,
Benja. Harrison,
Thos. Nelson, Jr.,
Francis Lightfoot Lee,
Carter Braxton.

North Carolina.

Wm. Hooper,
Joseph Hewes,
John Penn.

South Carolina.

Edward Rutledge,
Thos. Heyward, Junr.,
Thomas Lynch, Junr.,
Arthur Middleton.

Georgia.

Button Gwinnett,
Lyman Hall,
Geo. Walton.

IN CONGRESS

JANUARY, 18, 1777. }

Ordered:

That an authenticated copy of the Declaration of Independency, with the names of the Members of Congress subscribing the same, be sent to each of the United States, and that they be desired to have the same put on record.

By order of Congress.

Attest, CHAS. THOMSON,
Secy.

A true copy.
JOHN HANCOCK,
Presidt.

JOHN HANCOCK,
President.

As early as April 12, 1776, the legislature of North Carolina authorized its delegates to the Continental Congress to join with others in a declaration of separation from Great Britain; the first colony to instruct its delegates to take the actual initiative was Virginia on May 15.

On June 7, 1776, Richard Henry Lee of Virginia offered a resolution to the Continental Congress to the effect "that these United Colonies are, and of right, ought to be, free and independent States, that they are absolved from all allegiance to the British Crown, and that all political connection between them and the State of Great Britain is, and ought to be, totally dissolved." It was seconded by John Adams, and three days later a committee, including Thomas Jefferson, John Adams, Benjamin Franklin, Robert R. Livingston and Roger Sherman was organized to "pre-

pare a declaration to the effect of the said first resolution". This committee brought in its draft on June 28. Congress adopted the resolution previously submitted on July 2 by a vote of 12 states voting unanimously, Pennsylvania and Delaware divided and New York not voting until several days later.

The Declaration of Independence was adopted on July 4, 1776.

Most of the delegates signed the Declaration of Independence on August 2d but George Wythe (Va.) signed on August 27; Richard Henry Lee (Va.), Elbridge Gerry (Mass.) and Oliver Wolcott (Conn.) in September; Matthew Thornton (N. H.), not a delegate until September, in November; and Thomas McKean (Del.), although present on July 4, not until 1781 by special permission, having served in the army in the interim.

CONSTITUTION of the UNITED STATES OF AMERICA

THE oldest federal constitution in existence was framed by a convention of delegates from twelve of the thirteen original states in Philadelphia in May 1787, Rhode Island failing to send a delegate. George Washington presided over the session, which lasted until September 17, 1787. The draft (originally a preamble and seven Articles) was submitted to all thirteen states and was to become effective when ratified by nine states. It went into effect on the first Wednesday in March 1789, having been ratified by New Hampshire, the ninth state to approve, on June 21, 1788. The states ratified the Constitution in the following order:

Delaware	December 7, 1787	South Carolina	May 23, 1788
Pennsylvania	December 12, 1787	New Hampshire	June 21, 1788
New Jersey	December 18, 1787	Virginia	June 25, 1788
Georgia	January 2, 1788	New York	July 26, 1788
Connecticut	January 9, 1788	North Carolina	November 21, 1788
Massachusetts	February 6, 1788	Rhode Island	May 29, 1790
Maryland	April 28, 1788		

Outline of the Constitution

ARTICLE I

SEC. 1. Legislative powers; in whom vested.

SEC. 2. House of Representatives, how and by whom chosen—Qualifications of a Representative—Representatives and direct taxes, how apportioned—Enumeration—Vacancies to be filled—Power of choosing officers, and of impeachment.

SEC. 3. Senators, how and by whom chosen—How classified—State Executive, when to make temporary appointments, in case, etc.—Qualifications of a Senator—President of the Senate, his right to vote—President pro tem., and other officers of the Senate, how chosen—Power to try impeachments—When President is tried, Chief Justice to preside—Sentence.

SEC. 4. Times, etc., of holding elections, how prescribed—At least one Session in each year.

SEC. 5. Membership—Quorum—Adjournments—Rules—Power to punish or expel—Journal—Time of adjournments, how limited, etc.

SEC. 6. Compensation—Privileges—Disqualification in certain cases.

SEC. 7. House to originate all revenue bills—Veto—Bill may be passed by two-thirds of each house, notwithstanding, etc.—Bill, not returned in ten days, to become a law—Provisions as to orders, concurrent resolutions, etc.

SEC. 8. Powers of Congress.

SEC. 9. Provision as to migration or importation of certain persons—Habeas Corpus—Bills of attainder, etc.—Taxes, how apportioned—No export duty—No commercial preference—Money, how drawn from treasury, etc.—No titular nobility—Officers not to receive presents, etc.

SEC. 10. States prohibited from the exercise of certain powers.

ARTICLE II

SEC. 1. President; his term of office—Electors of President; number and how appointed—Electors to vote on same day—Qualification of President—On whom his duties devolve in case of his removal, death, etc.—President's compensation—His oath of office.

SEC. 2. President to be commander in chief—He may require opinions of Cabinet Officers, etc., may pardon—Treaty-making power—Nomination of certain officers—When President may fill vacancies.

SEC. 3. President shall communicate to Congress—He may convene and adjourn Congress, in case of disagreement, etc.—Shall receive ambassadors, execute laws, and commission officers.

SEC. 4. All civil offices forfeited for certain crimes.

ARTICLE III

SEC. 1. Judicial powers—Tenure—Compensation.

SEC. 2. Judicial power; to what cases it extends—Original jurisdiction of Supreme Court—Appellate—Trial by jury, etc.—Trial, where.

SEC. 3. Treason defined—Proof of—Punishment of.

ARTICLE IV

SEC. 1. Each State to give credit to the public acts, etc., of every other State.

SEC. 2. Privileges of citizens of each State—Fugitives from justice to be delivered up—Persons held to service having escaped, to be delivered up.

SEC. 3. Admission of new States—Power of Congress over territory and other property.

SEC. 4. Republican form of government guaranteed—Each State to be protected.

ARTICLE V

Constitution; how amended—Proviso.

ARTICLE VI

Certain debts, etc., declared valid—Supremacy of Constitution, treaties, and laws of the United States—Oath to support Constitution, by whom taken—No religious test.

ARTICLE VII

What ratification shall establish Constitution.

AMENDMENTS

- I. Religious establishment prohibited—Freedom of speech, of the press, and right to petition.
- II. Right to keep and bear arms.
- III. No soldier to be quartered in any house, unless, etc.
- IV. Right of search and seizure regulated.
- V. Provisions concerning prosecution, trial and punishment—Private property not to be taken for public use, without compensation.
- VI. Further provision respecting criminal prosecutions.

VII. Right of trial by jury secured.

VIII. Excessive bail or fines and cruel punishments prohibited.

IX. Rule of construction of Constitution.

X. Same subject; rights of States.

XI. Same subject; judicial powers construed.

XII. Manner of choosing President and Vice President.

XIII. Slavery abolished.

XIV. Citizenship; representation—Public debt.

XV. Right of suffrage—By whom exercised.

XVI. Taxes on incomes.

XVII. Election of senators—Filling of vacancies.

XVIII. Prohibition.

XIX. Suffrage; not to be denied because of sex.

XX. Commencement of terms of President, Vice President and members of Congress; time of assembling of Congress.

XXI. Repeal of Prohibition.

The Constitution of the United States of America

PREAMBLE.—WE THE PEOPLE of the United States, in Order to form a more perfect Union, establish Justice, insure domestic Tranquillity, provide for the common defence, promote the general Welfare, and secure the Blessings of Liberty to ourselves and our Posterity, do ordain and establish this Constitution for the United States of America.

ARTICLE I

Section 1

Legislative powers vested in Congress.—All legislative Powers herein granted shall be vested in a Congress of the United States, which shall consist of a Senate and House of Representatives.

Section 2

Composition of the House of Representatives.—1. The House of Representatives shall be composed of Members chosen every second Year by the People of the several States, and the Electors in each State shall have the Qualifications requisite for Electors of the most numerous Branch of the State Legislature.

Qualifications of Representatives.—2. No Person shall be a Representative who shall not have attained to the Age of twenty-five Years, and been seven Years a Citizen

of the United States, and who shall not, when elected, be an Inhabitant of that State in which he shall be chosen.

Apportionment of Representatives and direct taxes—census.*—3. [Representatives and direct Taxes shall be apportioned among the several States which may be included within this Union, according to their respective Numbers, which shall be determined by adding to the whole Number of free Persons, including those bound to Service for a Term of Years, and excluding Indians not taxed, three fifths of all other persons.] The actual Enumeration shall be made within three Years after the first Meeting of the Congress of the United States, and within every subsequent Term of ten Years, in such Manner as they shall by Law direct. The Number of Representatives shall not exceed one for every thirty Thousand, but each State shall have at Least one Representative; and until such enumeration shall be made, the State of New Hampshire shall be entitled to chuse three, Massachusetts eight, Rhode-Island and Providence Plantations one, Connecticut five, New York six, New Jersey four, Pennsylvania eight, Delaware one, Maryland six, Virginia ten, North Carolina five, South Carolina five, and Georgia three.

Filling of vacancies in representation.—4. When vacancies happen in the Representation from any State, the Executive Au-

*The clause included in brackets is amended by the fourteenth amendment, second section.

thority thereof shall issue Writs of Election to fill such Vacancies.

Selection of officers; power of impeachment.—5. The House of Representatives shall chuse their Speaker and other Officers; and shall have the sole Power of Impeachment.

Section 3*

The Senate.—[1. The Senate of the United States shall be composed of two Senators from each State, chosen by the Legislature thereof, for six Years; and each Senator shall have one Vote.]

Classification of Senators; filling of vacancies.—2. Immediately after they shall be assembled in Consequence of the first Election, they shall be divided as equally as may be into three Classes. The Seats of the Senators of the first Class shall be vacated at the expiration of the second Year, of the second Class at the Expiration of the fourth Year, and of the third Class at the Expiration of the sixth Year, so that one-third may be chosen every second Year; and if Vacancies happen by Resignation, or otherwise, during the Recess of the Legislature of any State, the Executive thereof may make temporary Appointments [until the next Meeting of the Legislature, which shall then fill such Vacancies.]

Qualification of Senators.—3. No Person shall be a Senator who shall not have attained to the Age of thirty Years, and been nine Years a Citizen of the United States, and who shall not, when elected, be an Inhabitant of that State for which he shall be chosen.

Vice-President to be President of Senate.—4. The Vice-President of the United States shall be President of the Senate, but shall have no Vote, unless they be equally divided.

Selection of Senate officers; President pro tempore.—5. The Senate shall chuse their other Officers, and also a President pro tempore, in the absence of the Vice-President, or when he shall exercise the Office of President of the United States.

Senate to try impeachments.—6. The Senate shall have the sole Power to try all Impeachments. When sitting for that Purpose, they shall be on Oath or Affirmation. When the President of the United States is tried, the Chief Justice shall preside: And no Person shall be convicted without the Concurrence of two thirds of the Members present.

Judgment in cases of impeachment.—7. Judgment in Cases of Impeachment shall not extend further than to removal from Office, and disqualification to hold and en-

joy any Office of honor, Trust, or Profit under the United States: but the Party convicted shall nevertheless be liable and subject to Indictment, Trial, Judgment and Punishment, according to Law.

Section 4

Control of congressional elections.—1. The Times, Places and Manner of holding Elections for Senators and Representatives, shall be prescribed in each State by the Legislature thereof; but the Congress may at any time by Law make or alter such Regulations, except as to the Places of chusing Senators.

Time for assembling of Congress.†—2. The Congress shall assemble at least once in every Year, and such Meeting shall be on the first Monday in December, unless they shall by Law appoint a different Day.

Section 5

Each house to be the judge of the election and qualifications of its members; regulations as to quorum.—1. Each House shall be the Judge of the Elections, Returns and Qualifications of its own Members, and a Majority of each shall constitute a Quorum to do Business; but a smaller Number may adjourn from day to day, and may be authorized to compel the Attendance of absent Members, in such Manner, and under such Penalties as each House may provide.

Each house to determine its own rules.—2. Each House may determine the Rules of its Proceedings, punish its Members for disorderly Behavior, and, with the Concurrence of two thirds, expel a Member.

Journals and yeas and nays.—3. Each House shall keep a Journal of its Proceedings, and from time to time publish the same, excepting such Parts as may in their Judgment require Secrecy; and the Yeas and Nays of the Members of either House on any question shall, at the Desire of one fifth of those Present, be entered on the Journal.

Adjournment.—4. Neither House, during the Session of Congress shall, without the Consent of the other, adjourn for more than three days, nor to any other Place than that in which the two Houses shall be sitting.

Section 6

Compensation and privileges of Members of Congress.—1. The Senators and Representatives shall receive a Compensation for their Services, to be ascertained by Law, and paid out of the Treasury of the United States. They shall in all Cases, except Treason, Felony and Breach of the

*The first paragraph of section three of article I of the Constitution of the United States, and so much of paragraph two of the same section as relates to filling vacancies, are amended by the seventeenth amendment to the Constitution.

†Amended by article XX, section 2, of the amendments to the Constitution.

Peace, be privileged from Arrest during their Attendance at the Session of their respective Houses, and in going to and returning from the same; and for any Speech or Debate in either House, they shall not be questioned in any other Place.

Incompatible offices; exclusions.—2. No Senator or Representative shall, during the Time for which he was elected, be appointed to any civil Office under the Authority of the United States, which shall have been created, or the Emoluments whereof shall have been increased during such time; and no Person holding any Office under the United States, shall be a Member of either House during his Continuance in Office.

Section 7

Revenue bills to originate in House.—1. All Bills for raising Revenue shall originate in the House of Representatives; but the Senate may propose or concur with Amendments as on other Bills.

Manner of passing bills; veto power of President.—2. Every Bill which shall have passed the House of Representatives and the Senate, shall, before it becomes a Law, be presented to the President of the United States; If he approve he shall sign it, but if not he shall return it, with his Objections to that House in which it shall have originated, who shall enter the Objections at large on their Journal, and proceed to reconsider it. If after such Reconsideration two thirds of that House shall agree to pass the Bill, it shall be sent, together with the Objections, to the other House, by which it shall likewise be reconsidered, and if approved by two thirds of that House, it shall become a Law. But in all such Cases the Votes of both Houses shall be determined by Yeas and Nays, and the Names of the Persons voting for and against the Bill shall be entered on the Journal of each House respectively. If any Bill shall not be returned by the President within ten Days (Sundays excepted) after it shall have been presented to him, the Same shall be a Law, in like Manner as if he had signed it, unless the Congress by their Adjournment prevent its Return, in which Case it shall not be a Law.

Concurrent orders or resolutions, to be passed by President.—3. Every Order, Resolution, or Vote to which the Concurrence of the Senate and House of Representatives may be necessary (except on a question of adjournment) shall be presented to the President of the United States; and before the Same shall take Effect, shall be approved by him, or being disapproved by him, shall be repassed by two thirds of the Senate and House of Representatives, according to the Rules and Limitations prescribed in the Case of a Bill.

Section 8

General powers of Congress.*

The Congress shall have Power.—1. To lay and collect Taxes, Duties, Imports and Excises, to pay the Debts and provide for the common Defence and general Welfare of the United States; but all Duties, Imports and Excises shall be uniform throughout the United States.

Borrowing of money.—2. To borrow money on the credit of the United States.

Regulation of commerce.—3. To regulate Commerce with foreign Nations, and among the several States, and with the Indian tribes.

Naturalization and bankruptcy.—4. To establish a uniform Rule of Naturalization, and uniform Laws on the subject of Bankruptcies throughout the United States.

Money, weights and measures.—5. To coin Money, regulate the Value thereof, and of foreign Coin, and fix the Standard of Weights and Measures.

Counterfeiting.—6. To provide for the Punishment of counterfeiting and Securities and current Coin of the United States.

Post offices.—7. To establish Post Offices and post Roads.

Patents and copyrights.—8. To promote the Progress of Science and useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries.

Inferior courts.—9. To constitute Tribunals inferior to the supreme Court.

Piracies and felonies.—10. To define and punish Piracies and Felonies committed on the high Seas, and Offenses against the Law of Nations.

War; marque and reprisal.—11. To declare War, grant Letters of Marque and Reprisal, and make Rules concerning Captures on Land and Water.

Armies.—12. To raise and support Armies, but no Appropriation of Money to that Use shall be for a longer Term than two Years.

Navy.—13. To provide and maintain a Navy.

Land and naval forces.—14. To make Rules for the Government and Regulation of the land and naval Forces.

Calling out militia.—15. To provide for calling forth the Militia to execute the Laws of the Union, suppress Insurrections and repel Invasions.

Organizing, arming and disciplining militia.—16. To provide for organizing, arming, and disciplining the Militia, and for governing such Part of them as may be

*By article XVI of the amendments to the Constitution, Congress is given the power to lay and collect taxes on incomes.

employed in the Service of the United States, reserving to the States, respectively, the Appointment of the Officers, and the Authority of training the Militia according to the discipline prescribed by Congress.

Exclusive legislation over District of Columbia.—17. To exercise exclusive Legislation in all Cases whatsoever, over such District (not exceeding ten Miles square) as may, by Cession of particular States, and the acceptance of Congress, become the Seat of the Government of the United States, and to exercise like Authority over all Places purchased by the Consent of the Legislature of the State in which the Same shall be, for the Erection of Forts, Magazines, Arsenals, dock-Yards, and other needful Buildings;—and

To enact laws necessary to enforce Constitution.—18. To make all Laws which shall be necessary and proper for carrying into Execution the foregoing Powers, and all other Powers vested by this Constitution in the Government of the United States, or in any Department or Officer thereof.

Section 9

Migration or importation of certain persons not to be prohibited before 1808.—1. The Migration or Importation of such Persons as any of the States now existing shall think proper to admit, shall not be prohibited by the Congress prior to the Year one thousand eight hundred and eight, but a tax or duty may be imposed on such Importation, not exceeding ten dollars for each Person.

Writ of habeas corpus not to be suspended; exception.—2. The privilege of the Writ of Habeas Corpus shall not be suspended, unless when in Cases of Rebellion or Invasion the public Safety may require it.

Bills of attainder and ex post facto laws prohibited.—3. No Bill of Attainder or ex post facto Law shall be passed.

Capitation and other direct taxes.—4. No Capitation, or other direct, Tax shall be laid, unless in Proportion to the Census or Enumeration herein before directed to be taken.*

Exports not to be taxed.—5. No Tax or Duty shall be laid on Articles exported from any State.

No preference to be given to ports of any State; interstate shipping.—6. No Preference shall be given by any Regulation of Commerce or Revenue to the Ports of one State over those of another: nor shall Vessels bound to, or from, one State, be obliged to enter, clear, or pay Duties in another.

Money, how drawn from treasury; financial statements to be published.—7. No Money shall be drawn from the Treasury, but in Consequence of Appropriations made by Law; and a regular Statement and Account of the Receipts and Expenditures of all public Money shall be published from time to time.

Titles of nobility not to be granted; acceptance by government officers of favors from foreign powers.—8. No Title of Nobility shall be granted by the United States: And no Person holding any Office of Profit or Trust under them, shall, without the Consent of the Congress, accept of any present, Emolument, Office, or Title, of any kind whatever, from any King, Prince, or foreign State.

Section 10

Limitations of the powers of the several States.—1. No State shall enter into any Treaty, Alliance, or Confederation; grant Letters of Marque and Reprisal; coin Money; emit Bills of Credit; make any Thing but gold and silver Coin a Tender in Payment of Debts; pass any Bill of Attainder, ex post facto Law, or Law impairing the Obligation of Contracts or grant any Title of Nobility.

State imposts and duties.—2. No State shall, without the Consent of the Congress, lay any Imposts or Duties on Imports or Exports, except what may be absolutely necessary for executing its inspection Laws: and the net Produce of all Duties and Imposts, laid by any State on Imports or Exports, shall be for the Use of the Treasury of the United States; and all such Laws shall be subject to the Revision and Control of the Congress.

Further restrictions on powers of States.—3. No State shall, without the consent of Congress, lay any duty of Tonnage, keep Troops, or Ships of War in time of Peace, enter into any Agreement or Compact with another State, or with a foreign Power, or engage in War, unless actually invaded, or in such imminent Danger as will not admit of delay.

ARTICLE II

Section 1

The President; the executive power.—1. The executive Power shall be vested in a President of the United States of America. He shall hold his Office during the Term of four Years, and, together with the Vice-President, chosen for the same Term, be elected, as follows:

Appointment and qualifications of presidential electors.—2. Each State shall appoint, in such Manner as the Legislature thereof may direct, a Number of Electors,

*See sixteenth amendment.

equal to the whole Number of Senators and Representatives to which the State may be entitled in the Congress: but no Senator or Representative, or Person holding an Office of Trust or Profit under the United States, shall be appointed an Elector.

Original method of electing the President and Vice-President.*—[The Electors shall meet in their respective States, and vote by Ballot for two persons, of whom one at least shall not be an Inhabitant of the same State with themselves. And they shall make a List of all the Persons voted for, and of the Number of Votes for each; which List they shall sign and certify, and transmit sealed to the Seat of the Government of the United States, directed to the President of the Senate. The President of the Senate shall, in the Presence of the Senate and House of Representatives, open all the Certificates, and the Votes shall then be counted. The Person having the greatest Number of Votes shall be the President, if such Number be a Majority of the whole Number of Electors appointed; and if there be more than one who have such Majority, and have an equal Number of Votes, then the House of Representatives shall immediately chuse by Ballot one of them for President; and if no Person have a Majority, then from the five highest on the list the said House shall in like Manner chuse the President. But in chusing the President, the Votes shall be taken by States, the Representation from each State having one Vote; A quorum for this Purpose shall consist of a Member or Members from two-thirds of the States, and a Majority of all the States shall be necessary to a Choice. In every Case, after the Choice of the President, the Person having the greatest Number of Votes of the Electors shall be the Vice-President. But if there should remain two or more who have equal Votes, the Senate should chuse from them by Ballot the Vice-President.]

Congress may determine time of choosing electors and day for casting their votes.—

3. The Congress may determine the Time of chusing the Electors, and the Day on which they shall give their Votes; which Day shall be the same throughout the United States.

Qualifications for the office of President.†

—4. No person except a natural born Citizen, or a Citizen of the United States, at the time of the Adoption of this Constitution, shall be eligible to the Office of President; neither shall any Person be eligible to that Office who shall not have attained to the Age of thirty-five Years, and been fourteen Years a Resident within the United States.

Filling vacancy in the office of President.‡—5. In Case of the Removal of the President from Office, or of his Death, Resignation, or Inability to discharge the Powers and Duties of the said Office, the same shall devolve on the Vice-President, and the Congress may by Law provide for the Case of Removal, Death, Resignation or Inability, both of the President and Vice-President, declaring what Officer shall then act as President, and such Officer shall act accordingly, until the Disability be removed, or a President shall be elected.

Compensation of the President.—6. The President shall, at stated Times, receive for his Services, a Compensation, which shall neither be increased nor diminished during the Period for which he shall have been elected, and he shall not receive within that Period any other Emolument from the United States, or any of them.

Oath to be taken by the President.—7. Before he enter on the Execution of his Office, he shall take the following Oath or Affirmation:—"I do solemnly swear (or affirm) that I will faithfully execute the Office of President of the United States, and will to the best of my Ability, preserve, protect and defend the Constitution of the United States."

Section 2

The President to be commander-in-chief of army and navy and head of executive departments; may grant reprieves and pardons.—1. The President shall be Commander-in-Chief of the Army and Navy of the United States, and of the Militia of the several States, when called into the actual Service of the United States; he may require the Opinion, in writing, of the principal Officer in each of the executive Departments, upon any subject relating to the Duties of their respective Offices, and he shall have Power to grant Reprieves and Pardons for Offenses against the United States, except in Cases of Impeachment.

President may, with concurrence of Senate, make treaties, appoint ambassadors, etc.; appointment of inferior officers, authority of Congress over.—2. He shall have Power, by and with the Advice and Consent of the Senate, to make Treaties, provided two-thirds of the Senators present concur; and he shall nominate, and by and with the Advice and Consent of the Senate, shall appoint Ambassadors, other public Ministers and Consuls, Judges of the supreme Court, and all other Officers of the United States, whose Appointments are not herein otherwise provided for, and which shall be established by Law; but the Congress may by Law vest the Appoint-

*This clause has been superseded by the twelfth amendment.

†For qualifications of the Vice President, see article XII of the amendments.

‡Amended by article XX, sections 3, and 4, of the amendments to the Constitution.

ment of such inferior Officers, as they think proper, in the President alone, in the Courts of Law, or in the Heads of Departments.

President may fill vacancies in office during recess of Senate.—3. The President shall have Power to fill up all Vacancies that may happen during the Recess of the Senate, by granting Commissions which shall expire at the End of their next Session.

Section 3

President to give advice to Congress; may convene or adjourn it on certain occasions; to receive ambassadors, etc.; have laws executed and commission all officers.—He shall from time to time give to the Congress Information of the State of the Union, and recommend to their Consideration such Measures as he shall judge necessary and expedient; he may, on extraordinary Occasions, convene both Houses, or either of them, and in Case of Disagreement between them, with Respect to the Time of Adjournment, he may adjourn them to such Time as he shall think proper; he shall receive Ambassadors and other public Ministers; he shall take Care that the Laws be faithfully executed, and shall Commission all the Officers of the United States.

Section 4

All civil officers removable by impeachment.—1. The President, Vice-President and all civil Officers of the United States, shall be removed from Office on Impeachment for, and Conviction of, Treason, Bribery, or other high Crimes and Misdemeanors.

ARTICLE III

Section 1

Judicial power; how vested; term of office and compensation of judges.—The judicial Power of the United States, shall be vested in one supreme Court, and in such inferior Courts as the Congress may from time to time ordain and establish. The Judges, both of the supreme and inferior Courts, shall hold their Offices during good Behavior, and shall, at stated Times, receive for their Services a Compensation which shall not be diminished during their Continuance in Office.

Section 2

Jurisdiction of Federal courts.*—1. The judicial Power shall extend to all Cases, in Law and Equity, arising under this Constitution, the Laws of the United States, and Treaties made, or which shall be made, under their Authority;—to all Cases affecting Ambassadors, other public Ministers and Consuls;—to all Cases of Admiralty and maritime Jurisdiction;—to Controversies to which the United States shall

be a Party;—to Controversies between two or more States;—between a State and Citizens of another State;—between Citizens of different States;—between Citizens of the same State claiming Lands under Grants of different States, and between a State, or the Citizens thereof, and foreign States, Citizens or Subjects.

Original and appellate jurisdiction of Supreme Court.—2. In all Cases affecting Ambassadors, other public Ministers and Consuls, and those in which a State shall be Party, the supreme Court shall have original Jurisdiction. In all the other Cases before mentioned, the supreme Court shall have appellate Jurisdiction, both as to Law and Fact, with such Exceptions, and under such Regulations as the Congress shall make.

Trial of all crimes, except impeachment, to be by jury.—3. The trial of all Crimes, except in Cases of Impeachment, shall be by Jury; and such Trial shall be held in the State where the said Crimes shall have been committed; but when not committed within any State, the trial shall be at such Place or Places as the Congress may by Law have directed.

Section 3

Treason defined; conviction of.—1. Treason against the United States, shall consist only in levying War against them, or, in adhering to their Enemies, giving them Aid and Comfort. No Person shall be convicted of Treason unless on the Testimony of two Witnesses to the same overt Act, or on Confession in open Court.

Congress to declare punishment for treason; proviso.—2. The Congress shall have power to declare the Punishment of Treason, but no Attainder of Treason shall work Corruption of Blood, or Forfeiture except during the Life of the Person attainted.

ARTICLE IV

Section 1

Each State to give full faith and credit to the public acts and records of other States.—Full Faith and Credit shall be given in each State to the public Acts, Records, and judicial Proceedings of every other State. And the Congress may by general Laws prescribe the Manner in which such Acts, Records and Proceedings shall be proved, and the Effect thereof.

Section 2

Privileges of citizens.—1. The Citizens of each State shall be entitled to all Privileges and Immunities of Citizens in the several States.

Extradition between the several States.—2. A Person charged in any State with Treason, Felony, or other Crime, who shall

*This section is abridged by article XI of the amendments.

flee from Justice, and be found in another State, shall on demand of the executive Authority of the State from which he fled, be delivered up, to be removed to the State having Jurisdiction of the Crime.

Persons held to labor or service in one State, fleeing to another, to be returned.*—3. No Person held to Service or Labour in one State, under the Laws thereof, escaping into another, shall, in Consequence of any Law or Regulation therein, be discharged from such Service or Labour, but shall be delivered up on Claim of the Party to whom such Service or Labour may be due.

Section 3

New States.—1. New States may be admitted by the Congress into this Union; but no new State shall be formed or erected within the Jurisdiction of any other State; nor any State be formed by the Junction of two or more States, or parts of States, without the Consent of the Legislatures of the States concerned as well as of the Congress.

Regulations concerning territory.—2. The Congress shall have Power to dispose of and make all needful Rules and Regulations respecting the Territory or other Property belonging to the United States; and nothing in this Constitution shall be so construed as to Prejudice any Claims of the United States, or of any particular State.

Section 4

Republican form of government and protection guaranteed the several States.—The United States shall guarantee to every State in this Union a Republican Form of Government, and shall protect each of them against Invasion; and on Application of the Legislature, or of the Executive (when the Legislature cannot be convened) against domestic Violence.

ARTICLE V

Ways in which the Constitution can be amended.—The Congress, whenever two-thirds of both Houses shall deem it necessary, shall propose Amendments to this Constitution, or, on the Application of the Legislatures of two-thirds of the several States, shall call a Convention for proposing Amendments, which, in either Case, shall be valid to all Intents and Purposes, as part of this Constitution, when ratified by the Legislatures of three-fourths of the several States, or by Conventions in three-fourths thereof, as the one or the other Mode of Ratification may be proposed by the Congress; Provided that no Amendment which may be made prior to the Year One thousand eight hundred and eight shall in any Manner affect the first and

fourth Clauses in the Ninth Section of the first Article; and that no State, without its Consent, shall be deprived of its equal Suffrage in the Senate.

ARTICLE VI

Debts contracted under the confederation secured.—1. All Debts contracted and Engagements entered into, before the Adoption of this Constitution, shall be as valid against the United States under this Constitution, as under the Confederation.

Constitution, laws and treaties of the United States to be supreme.—2. This Constitution, and the Laws of the United States shall be made in Pursuance thereof; and all Treaties made, or which shall be made, under the Authority of the United States, shall be the supreme Law of the Land; and the Judges in every State shall be bound thereby, any Thing in the Constitution or Laws of any State to the Contrary notwithstanding.

Who shall take constitutional oath; no religious test as to official qualification.—3. The Senators and Representatives before mentioned, and the Members of the several State Legislatures, and all executive and judicial Officers, both of the United States and of the several States, shall be bound by Oath or Affirmation, to support this Constitution; but no religious Test shall ever be required as a Qualification to any Office or public Trust under the United States.

ARTICLE VII

Constitution to be considered adopted when ratified by nine States.—The Ratification of the Conventions of nine States shall be sufficient for the Establishment of this Constitution between the States so ratifying the Same.

Done in Convention by the Unanimous Consent of the States present the Seventeenth Day of September in the Year of our Lord one thousand seven hundred and Eighty seven and of the Independence of the United States of America the Twelfth. In Witness whereof We have hereunto subscribed our Names.

GO. WASHINGTON

President and Deputy from Virginia

NEW HAMPSHIRE

John Langdon Nicholas Gilman

MASSACHUSETTS

Nathaniel Gorham Rufus King

CONNECTICUT

Wm Saml Johnson Roger Sherman

NEW YORK

Alexander Hamilton

NEW JERSEY

Wm. Livingston Wm. Paterson
David Brearley Jona. Dayton

*See thirteenth amendment.

PENNSYLVANIA

B. Franklin
Robt. Morris
Thos. Fitzsimons
James Wilson

Thomas Mifflin
Geo. Clymer
Jared Ingersoll
Gouv Morris

DELAWARE

Geo. Read
John Dickinson
Jaco: Broom

Gunning Bedford Jun
Richard Bassett

MARYLAND

James McHenry
Danl Carroll

Dan: of St Thos Jenifer

VIRGINIA

John Blair —

James Madison Jr.

NORTH CAROLINA

Wm Blount
Hu Williamson

Richd Dobbs Spaight,

SOUTH CAROLINA

J. Rutledge
Charles Pinckney

Charles Cotesworth Pinckney.
Pierce Butler

GEORGIA

William Few

Abr Baldwin

Attest: William Jackson, Secretary.

AMENDMENTS TO THE CONSTITUTION OF THE UNITED STATES

[The following amendments from Articles I to X inclusive were proposed at the first session of the first Congress which convened in New York City on March 4, 1789, and were adopted as follows: New Jersey, Nov. 20, 1789; Maryland, Dec. 19, 1789; North Carolina, Dec. 22, 1789; South Carolina, Jan. 19, 1790; New Hampshire, Jan. 25, 1790; Delaware, Jan. 28, 1790; Pennsylvania, March 10, 1790; New York, March 27, 1790; Rhode Island, June 15, 1790; Vermont, Nov. 3, 1791; and Virginia, Dec. 15, 1791.]

ARTICLE I

Freedom of religion, speech, of the press, and right of petition.—Congress shall make no law respecting an establishment of religion, or prohibiting the free exercise thereof; or abridging the freedom of speech, or of the press; or the right of the people peaceably to assemble, and to petition the Government for a redress of grievances.

ARTICLE II

Right of people to bear arms not to be infringed.—A well regulated Militia, being necessary to the security of a free State, the right of the people to keep and bear Arms, shall not be infringed.

ARTICLE III

Quartering of troops.—No Soldier shall, in time of peace be quartered in any house, without the consent of the Owner, nor in time of war, but in a manner to be prescribed by law.

ARTICLE IV

Persons and houses to be secure from unreasonable searches and seizures.—The right of the people to be secure in their persons, houses, papers, and effects, against unreasonable searches and seizures, shall not be violated, and no Warrants shall issue, but upon probable cause, supported by Oath or affirmation, and particularly describing the place to be searched, and the persons or things to be seized.

ARTICLE V

Trials for crimes; just compensation for private property taken for public use.—No person shall be held to answer for a capi-

tal, or otherwise infamous crime, unless on a presentment or indictment of a Grand Jury, except in cases arising in the land or naval forces, or in the Militia, when in actual service in time of War or public danger; nor shall any person be subject for the same offence to be twice put in jeopardy of life or limb; nor shall be compelled in any criminal case to be a witness against himself, nor be deprived of life, liberty, or property, without due process of law; nor shall private property be taken for public use, without just compensation.

ARTICLE VI

Civil rights in trials for crimes enumerated.—In all criminal prosecutions, the accused shall enjoy the right to a speedy and public trial, by an impartial jury of the State and district wherein the crime shall have been committed, which district shall have been previously ascertained by law, and to be informed of the nature and cause of the accusation; to be confronted with the witnesses against him; to have compulsory process for obtaining witnesses in his favor, and to have the Assistance of Counsel for his defence.

ARTICLE VII

Civil rights in civil suits.—In suits at common law, where the value in controversy shall exceed twenty dollars, the right of trial by jury shall be preserved, and no fact tried by a jury, shall be otherwise re-examined in any Court of the United States, than according to the rules of the common law.

ARTICLE VIII

Excessive bail, fines and punishments prohibited.—Excessive bail shall not be required, nor excessive fines imposed, nor cruel and unusual punishments inflicted.

ARTICLE IX

Reserved rights of people.—The enumeration in the Constitution, of certain rights, shall not be construed to deny or disparage others retained by the people.

ARTICLE X

Powers not delegated, reserved to states and people respectively.—The powers not

delegated to the United States by the Constitution, nor prohibited by it to the States, are reserved to the States respectively, or to the people.

[The Eleventh Amendment was proposed to the several states by the Third Congress on March 5, 1794, and declared effective January 8, 1798.]

ARTICLE XI

Judicial power of United States not to extend to suits against a State.—The Judicial power of the United States shall not be construed to extend to any suit in law or equity, commenced or prosecuted against one of the United States by Citizens of another State, or by Citizens or Subjects of any Foreign State.

[The Twelfth Amendment was submitted to the legislatures of the states by the Eighth Congress on December 12, 1803, and became part of the Constitution September 25, 1804.]

ARTICLE XII

Present mode of electing President and Vice-President by electors.*—The Electors shall meet in their respective states and vote by ballot for President and Vice-President, one of whom, at least, shall not be an inhabitant of the same state with themselves; they shall name in their ballots the person voted for as President, and in distinct ballots the person voted for as Vice-President, and they shall make distinct lists of all persons voted for as President, and of all persons voted for as Vice-President, and of the number of votes for each, which lists they shall sign and certify, and transmit sealed to the seat of the government of the United States, directed to the President of the Senate;—The President of the Senate shall, in the presence of the Senate and House of Representatives, open all the certificates and the votes shall then be counted;—The person having the greatest number of votes for President, shall be the President, if such number be a majority of the whole number of electors appointed; and if no person have such majority, then from the persons having the highest numbers not exceeding three on the list of those voted for as President, the House of Representatives shall choose immediately, by ballot, the President. But in choosing the President, the votes shall be taken by states, the representation from each State having one vote; a quorum for this purpose shall consist of a member or members from two-thirds of the states, and a majority of all the states shall be necessary to a choice. And if the House of Representatives shall not choose a President whenever the right of choice shall devolve upon them, before the fourth day of

March next following, then the Vice-President shall act as President, as in the case of the death or other constitutional disability of the President. The person having the greatest number of votes as Vice-President, shall be the Vice-President, if such number be a majority of the whole number of electors appointed, and if no person have a majority, then from the two highest numbers on the list, the Senate shall choose the Vice-President; a quorum for the purpose shall consist of two-thirds of the whole number of Senators, and a majority of the whole number shall be necessary to a choice. But no person constitutionally ineligible to the office of President shall be eligible to that of Vice-President of the United States.

[The Thirteenth Amendment was offered to the several states by the Thirty-eighth Congress on February 1, 1865, and declared in force December 18, 1865.]

ARTICLE XIII

Section 1

Slavery prohibited.—Neither slavery nor involuntary servitude, except as a punishment for crime whereof the party shall have been duly convicted, shall exist within the United States, or any place subject to their jurisdiction.

Section 2

Congress given power to enforce this article.—Congress shall have power to enforce this article by appropriate legislation.

[The Fourteenth Amendment was proposed to the legislature by the Thirty-ninth Congress on June 16, 1866 and was approved July 28, 1868.]

ARTICLE XIV

Section 1

Citizenship defined; privileges of citizens.—All persons born or naturalized in the United States, and subject to the jurisdiction thereof, are citizens of the United States and of the State wherein they reside. No State shall make or enforce any law which shall abridge the privileges or immunities of citizens of the United States; nor shall any State deprive any person of life, liberty, or property, without due process of law; nor deny to any person within its jurisdiction the equal protection of the laws.

Section 2

Apportionment of Representatives.—Representatives shall be apportioned among the several States according to their respective numbers, counting the whole number of persons in each State, excluding

*Amended by article XX, sections 3 and 4, of the amendments to the Constitution.

Indians not taxed. But when the right to vote at any election for the choice of electors for President and Vice-President of the United States, Representatives in Congress, the Executive and Judicial officers of a State, or the members of the Legislature thereof, is denied to any of the male inhabitants of such State, being twenty-one years of age, and citizens of the United States, or in any way abridged, except for participation in rebellion, or other crime, the basis of representation therein shall be reduced in the proportion which the number of such male citizens shall bear to the whole number of male citizens twenty-one years of age in such State.

Section 3

Disqualification for office; removal of disability.—No person shall be a Senator or Representative in Congress, or elector of President and Vice-President, or hold any office, civil or military, under the United States, or under any State, who, having previously taken an oath, as a member of Congress, or as an officer of the United States, or as a member of any State legislature, or as an executive or judicial officer of any State, to support the Constitution of the United States, shall have engaged in insurrection or rebellion against the same, or given aid or comfort to the enemies thereof. But Congress may by a vote of two-thirds of each House, remove such disability.

Section 4

Public debt not to be questioned; payment of debts and claims incurred in aid of rebellion forbidden.—The validity of the public debt of the United States, authorized by law, including debts incurred for payment of pensions and bounties for services in suppressing insurrection or rebellion, shall not be questioned. But neither the United States nor any State shall assume or pay any debt or obligation incurred in aid of insurrection or rebellion against the United States, or any claim for the loss or emancipation of any slave; but all such debts, obligations and claims shall be held illegal and void.

Section 5

Congress given power to enforce this article.—The Congress shall have power to enforce, by appropriate legislation, the provisions of this article.

[The Fifteenth Amendment was submitted to the State Legislatures by the Fortieth Congress on February 27, 1869, and declared in force March 30, 1870.]

ARTICLE XV

Section 1

Right of certain citizens to vote established.—The right of citizens of the United

States to vote shall not be denied or abridged by the United States or by any State, on account of race, color, or previous condition of servitude.

Section 2

Congress given power to enforce this article.—The Congress shall have power to enforce this article by appropriate legislation.

[The Sixteenth Amendment was proposed to the States by the Sixty-first Congress on July 12, 1909, and became effective February 25, 1913.]

ARTICLE XVI

Taxes on income; Congress given power to lay and collect.—The Congress shall have power to lay and collect taxes on incomes, from whatever source derived, without apportionment among the several States, and without regard to any census or enumeration.

[The Sixty-second Congress proposed the Seventeenth Amendment on May 16, 1912, and it became a part of the Constitution on May 31, 1913.]

ARTICLE XVII

Election of United States Senators; filling of vacancies; qualifications of electors.

1. The Senate of the United States shall be composed of two Senators from each State, elected by the people thereof, for six years; and each Senator shall have one vote. The electors in each State shall have the qualifications requisite for electors of the most numerous branch of the State legislatures.

2. When vacancies happen in the representation of any State in the Senate, the executive authority of such State shall issue writs of election to fill such vacancies: Provided, that the legislature of any State may empower the executive thereof to make temporary appointment until the people fill the vacancies by election as the legislature may direct.

3. This amendment shall not be so construed as to affect the election or term of any Senator chosen before it becomes valid as part of the Constitution.

[The Eighteenth or Dry Law Amendment was submitted to the legislatures of the several states by the Sixty-fifth Congress and on January 20, 1919, it was announced the amendment would be in full force on January 16, 1920.]

ARTICLE XVIII*

Manufacture, sale or transportation of intoxicating liquors, for beverage purposes, prohibited.—1. After one year from the ratification of this article the manufacture, sale, or transportation of intoxicating liquors within, the importation thereof

*Repealed by article XXI, effective December 5, 1933.

into, or the exportation thereof from the United States and all territory subject to the jurisdiction thereof for beverage purposes is hereby prohibited.

Congress and the several States given concurrent power to pass appropriate legislation to enforce this article.—2. The Congress and the several States shall have concurrent power to enforce this article by appropriate legislation.

Provisions of article to become operative, when adopted by three-fourths of the States.—3. This article shall be inoperative unless it shall have been ratified as an amendment to the Constitution by the legislatures of the several States, as provided in the Constitution, within seven years from the date of the submission hereof to the States by the Congress.

[The Nineteenth or Equal Suffrage Amendment was proposed to the states by the Sixty-sixth Congress on May 19, 1919, and ratified on August 26, 1920.]

ARTICLE XIX

The right of citizens to vote shall not be denied because of sex.—The right of citizens of the United States to vote shall not be denied or abridged by the United States or by any State on account of sex.

Congress shall have power to enforce this article by appropriate legislation.

[The Twentieth or "Lame Duck" Amendment was proposed to the legislatures by the Seventy-second Congress on March 3, 1932, and ratified by the thirty-sixth state on January 23, 1933. Sections 1 and 2 became effective October 15, 1933.]

ARTICLE XX

Section 1

Terms of President, Vice-President, Senators and Representatives.—The terms of the President and Vice-President shall end at noon on the 20th day of January, and the terms of Senators and Representatives at noon on the 3d day of January, of the years in which such terms would have ended if this article had not been ratified; and the terms of their successors shall then begin.

Section 2

Time of assembling Congress.—The Congress shall assemble at least once in every year, and such meeting shall begin at noon on the 3d day of January, unless they shall by law appoint a different day.

Section 3

Filling vacancy in office of President.—If, at the time fixed for the beginning of the term of the President, the President elect shall have died, the Vice-President elect shall become President. If a President shall not have been chosen before

the time fixed for the beginning of his term, or if the President elect shall have failed to qualify, then the Vice-President elect shall act as President until a President shall have qualified; and the Congress may by law provide for the case wherein neither a President elect nor a Vice-President elect shall have qualified, declaring who shall then act as President, or the manner in which one who is to act shall be selected, and such person shall act accordingly until a President or Vice-President shall have qualified.

Section 4

Power of Congress in Presidential succession.—The Congress may by law provide for the case of the death of any of the persons from whom the House of Representatives may choose a President whenever the right of choice shall have devolved upon them, and for the case of the death of any of the persons from whom the Senate may choose a Vice-President whenever the right of choice shall have devolved upon them.

Section 5

Time of taking effect.—Sections 1 and 2 shall take effect on the 15th day of October following the ratification of this article.

Section 6

Ratification.—This article shall be inoperative unless it shall have been ratified as an amendment to the Constitution by the legislatures of three-fourths of the several States within seven years from the date of its submission.

[The Twenty-first Amendment, repealing prohibition, was proposed by the second session of the Seventy-second Congress on February 20, 1933, and became effective with ratification by Utah, the thirty-sixth state to ratify, on December 5, 1933.]

ARTICLE XXI

Section 1

Repeal of Prohibition Amendment.—The eighteenth article of amendment to the Constitution of the United States is hereby repealed.

Section 2

Transportation of intoxicating liquors.—The transportation or importation into any State, Territory, or possession of the United States for delivery or use therein of intoxicating liquors, in violation of the laws thereof, is hereby prohibited.

Section 3

Ratification.—This article shall be inoperative unless it shall have been ratified as an amendment to the Constitution by conventions in the several States, as provided in the Constitution, within seven years from the date of the submission hereof to the States by the Congress.

The Mayflower Compact

On September 6, 1620, the *Mayflower*, a sailing vessel of about 180 tons, started her memorable voyage from Plymouth, England with 100 or 102* pilgrims aboard, bound for Virginia to establish a private permanent colony in North America. Arriving at Provincetown, Mass., on November 11 (November 21, new style calendar),

forty-two of the passengers signed the famous "Mayflower Compact" as the boat lay at anchor in that Cape Cod Harbor. A small detail of the Pilgrims, led by William Bradford, assigned to select a place for permanent settlement landed at what is now Plymouth, Mass., on December 21, n.s.

The text of the compact follows:

IN THE NAME OF GOD, Amen. We, whose names are underwritten, the Loyal Subjects of our dread Sovereign Lord, King James, by the Grace of God, of *Great Britain, France and Ireland, King, Defender of the Faith, &*,

Having undertaken for the Glory of God, and Advancement of the Christian Faith, and the Honour of our King and Country, a voyage to plant the first colony in the northern Parts of Virginia; do by these Presents, solemnly and mutually in the Presence of God and one of another, covenant and combine ourselves together into a civil Body Politick, for our better Ordering and Preservation, and Furtherance of the Ends aforesaid; And by Virtue hereof to enact, constitute, and frame, such just and equal Laws, Ordinances, Acts, Constitutions and Offices, from time to time, as shall be thought most meet and convenient for the General good of the Colony; unto which we promise all due Submission and Obedience.

In WITNESS whereof we have hereunto subscribed our names at *Cape Cod* the eleventh of *November*, in the Reign of our Sovereign Lord, King *James of England, France and Ireland*, the eighteenth, and of *Scotland* the fifty-fourth. *Anno Domini*, 1620

John Carver
Digery Priest
William Brewster
Edmund Margesson
John Alden
George Soule
James Chilton
Francis Cooke
Josias Fletcher
John Ridgate
Christopher Martin

William Mullins
Thomas English
John Howland
Stephen Hopkins
Edward Winslow
Gilbert Winslow
Miles Standish
Richard Bitteridge
Francis Eaton
John Tilly
John Billington

Thomas Tinker
Samuel Fuller
Richard Clark
John Allerton
Richard Warren
Edward Liester
William Bradford
Thomas Williams
Isaac Allerton
Peter Brown
John Turner

Edward Tilly
John Craxton
Thomas Rogers
John Goodman
Edward Fuller
Richard Gardiner
William White
Edward Doten

Lincoln's Gettysburg Address

The Battle of Gettysburg, one of the most noted battles of the Civil War, was fought on July 1, 2, and 3, 1863. On November 19, 1863, the field was dedicated as a national cemetery by President Lincoln in a two-minute speech that was to become immortal. At the time of its de-

livery the speech was relegated to the inside pages of the papers, while a two-hour address by Edward Everett, the leading orator of the time, caught the headlines.

The following is the text of the address revised by President Lincoln from his own notes:

FOURSCORE and seven years ago our fathers brought forth on this continent a new nation conceived in liberty and dedicated to the proposition that all men are created equal. Now we are engaged in a great civil war testing whether that nation, or any nation so conceived and so dedicated, can long endure. We are met on a great battlefield of that war. We have come to dedicate a portion of that field as a final resting-place for those who here gave their lives that that nation might live. It is altogether fitting and proper that we should do this. But, in a larger sense, we cannot dedicate, we cannot consecrate, we cannot hallow this ground. The brave men, living and dead, who struggled here have consecrated it far above our poor power to add or detract. The world will little note nor long remember what we say here, but it can never forget what they did here. It is for us the living rather to be dedicated here to the unfinished work which they who fought here have thus far so nobly advanced. It is rather for us to be here dedicated to the great task remaining before us—that from these honored dead we take increased devotion to that cause for which they gave the last full measure of devotion—that we here highly resolve that these dead shall not have died in vain, that this nation under God shall have a new birth of freedom, and that government of the people, by the people, for the people shall not perish from the earth.

*Historians differ as to whether 100, 101, or 102 passengers were aboard.

History of The Flag

Source: Encyclopaedia Britannica.

The first official American flag, known as the Grand Union Flag of the Continental Congress, was displayed on Prospect Hill in the American lines besieging Boston on January 1, 1776. It had thirteen red and white stripes, with the red cross of St. George superimposed on the white cross of St. Andrew upon a blue field in the upper right corner. On June 14, 1777, almost a year after the Declaration of Independence, the Continental Congress adopted the design which supplanted the last vestige of British influence in the flag. It was resolved that "The flag of the United States shall be thirteen stripes, alternate red and white, with a union of thirteen stars of white on a blue field, representing a new constellation." Although the thirteen stars were usually arranged in a circle, many other arrangements were evolved. No change in the design or number of stars was made until January 13, 1794, when Congress voted to add two stars and two stripes on the admission of Vermont and Kentucky to the union. In 1818, there were twenty states in the union with prospects of more to join. On April 18, 1818, Congress voted to perpetuate the original thirteen states by fixing the number of stripes as seven red and six alternate white stripes, with the number of stars in the blue field to correspond with the number of states in the union. Arizona and New Mexico added the last two of the present forty-eight stars to the flag on the date of their admission to the union on July 4, 1912.

During the Civil War, the Confederate Congress in session at Richmond, Va., in 1863, approved the design of a white flag, twice the length of the width and the field a red square two-thirds the width of the flag, containing a blue St. Andrew's Cross separated by a white fillet, and adorned with white stars to the number of the Confederate States. Later in 1865, a broad transverse strip of red was added to the white portion of the flag.

It has not been definitely proven that Betsy Ross designed and made the first American flag of stripes and stars. The first public statement was made by William J. Canby, grandson of Betsy Ross, on March 14, 1870, before the Historical Society of Pennsylvania. Mr. Canby, on later investigation, found no official document by Congress concerning the thirteen-striped, thirteen-starred flag before June 14, 1777. The story that George Washington, Robert Morris and George Ross as representatives from Congress visited Betsy Ross in June, 1776, with a request to design the flag is of general knowledge. There is no record of the adoption of any flag design by Congress prior to June 1777. The only record pertaining to Betsy Ross is in Harrisburg, Pa., in the form of a voucher dated May 29, 1777 for fourteen pounds and some shillings for flags she made for the Pennsylvania navy.

The present laws governing the display of the flag were not confirmed by Congress until June 22, 1942.

Flag Etiquette

(Public Law 829—77th Congress)

(Chapter 806—2d Session)

(H. J. Res. 359)

JOINT RESOLUTION

To amend Public Law Numbered 623, approved June 22, 1942, entitled "Joint resolution to codify and emphasize existing rules and customs pertaining to the display and use of the flag of the United States of America."

Resolved by the Senate and House of Representatives of the United States of America in Congress Assembled, That Public Law Numbered 623, approved June 22, 1942, entitled "Joint resolution to codify and emphasize existing rules and customs pertaining to the display and use of the flag of the United States of America," be, and the same is hereby amended to read as follows:

That the following codification of existing rules and customs pertaining to the display and use of the flag of the United States of America be, and it is hereby, established for the use of such civilians or

civilian groups or organizations as may not be required to conform with regulations promulgated by one or more executive departments of the Government of the United States.

SEC. 2. (a) It is the universal custom to display the flag only from sunrise to sunset on buildings and on stationary flag-staffs in the open. However, the flag may be displayed at night upon special occasions when it is desired to produce a patriotic effect.

(b) The flag should be hoisted briskly and lowered ceremoniously.

(c) The flag should not be displayed on days when the weather is inclement.

(d) The flag should be displayed on all days when the weather permits, especially on New Year's Day, January 1; Inauguration Day, January 20; Lincoln's Birthday, February 12; Washington's Birthday, Feb-

February 22; Army Day, April 6; Easter Sunday (variable); Mother's Day, second Sunday in May; Memorial Day (half-staff until noon), May 30; Flag Day, June 14; Independence Day, July 4; Labor Day, first Monday in September; Constitution Day, September 17; Columbus Day, October 12; Navy Day, October 27; Armistice Day, November 11; Thanksgiving Day, fourth Thursday in November; Christmas Day, December 25; such other days as may be proclaimed by the President of the United States; the birthdays of States (dates of admission); and on State holidays.

(e) The flag should be displayed daily, weather permitting, on or near the main administration building of every public institution.

(f) The flag should be displayed in or near every polling place on election days.

(g) The flag should be displayed during school days in or near every schoolhouse.

SEC. 3. That the flag, when carried in a procession with another flag or flags, should be either on the marching right; that is, the flag's own right, or, if there is a line of other flags, in front of the center of that line.

(a) The flag should not be displayed on a float in a parade except from a staff, or as provided in subsection (i).

(b) The flag should not be draped over the hood, top, sides, or back of a vehicle or of a railroad train or a boat. When the flag is displayed on a motorcar, the staff shall be fixed firmly to the chassis or clamped to the radiator cap.

(c) No other flag or pennant should be placed above or, if on the same level, to the right of the flag of the United States of America, except during church services conducted by naval chaplains at sea, when the church pennant may be flown above the flag during church services for the personnel of the Navy.

(d) The flag of the United States of America, when it is displayed with another flag against a wall from crossed staffs, should be on the right, the flag's own right, and its staff should be in front of the staff of the other flag.

(e) The flag of the United States of America should be at the center and at the highest point of the group when a number of flags of States or localities or pennants of societies are grouped and displayed from staffs.

(f) When flags of States, cities, or localities, or pennants of societies are flown on the same halyard with the flag of the United States, the latter should always be at the peak. When the flags are flown from adjacent staffs, the flag of the United States should be hoisted first and lowered last. No such flag or pennant may be placed above the flag of the United States or to the right of the flag of the United States.

(g) When flags of two or more nations

are displayed, they are to be flown from separate staffs of the same height. The flags should be of approximately equal size. International usage forbids the display of the flag of one nation above that of another nation in time of peace.

(h) When the flag of the United States is displayed from a staff projecting horizontally or at an angle from the window sill, balcony, or front of a building, the union of the flag should be placed at the peak of the staff unless the flag is at half-staff. When the flag is suspended over a sidewalk from a rope extending from a house to a pole at the edge of the sidewalk, the flag should be hoisted out, union first, from the building.

(i) When the flag is displayed otherwise than by being flown from a staff, it should be displayed flat, whether indoors or out, or so suspended that its folds fall as free as though the flag were staffed.

(j) When the flag is displayed over the middle of the street, it should be suspended vertically with the union to the north in an east and west street or to the east in a north and south street.

(k) When used on a speaker's platform, the flag, if displayed flat, should be displayed above and behind the speaker. When displayed from a staff in a church or public auditorium, if it is displayed in the chancel of a church, or on the speaker's platform in a public auditorium, the flag should occupy the position of honor and be placed at the clergyman's or speaker's right as he faces the congregation or audience. Any other flag so displayed in the chancel or on the platform should be placed at the clergyman's or speaker's left as he faces the congregation or audience. But when the flag is displayed from a staff in a church or public auditorium elsewhere than in the chancel or on the platform it shall be placed in the position of honor at the right of the congregation or audience as they face the chancel or platform. Any other flag so displayed should be placed on the left of the congregation or audience as they face the chancel or platform.

(l) The flag should form a distinctive feature of the ceremony of unveiling a statue or monument, but it should never be used as the covering for the statue or monument.

(m) The flag, when flown at half-staff, should be first hoisted to the peak for an instant and then lowered to the half-staff position. The flag should be again raised to the peak before it is lowered for the day. By "half-staff" is meant lowering the flag to one-half the distance between the top and bottom of the staff. Crepe streamers may be affixed to spearheads or flag-staffs in a parade only by order of the President of the United States.

(n) When the flag is used to cover a casket, it should be so placed that the union is at the head and over the left

shoulder. The flag should not be lowered into the grave or allowed to touch the ground.

Sec. 4. That no disrespect should be shown to the flag of the United States of America, the flag should not be dipped to any person or thing. Regimental colors, State flags, and organization or institutional flags are to be dipped as a mark of honor.

(a) The flag should never be displayed with the union down save as a signal of dire distress.

(b) The flag should never touch anything beneath it, such as the ground, the floor, water, or merchandise.

(c) The flag should never be carried flat or horizontally, but always aloft and free.

(d) The flag should never be used as drapery of any sort whatsoever, never fastened, drawn back, nor up, in folds, but always allowed to fall free. Bunting of blue, white, and red, always arranged with the blue above, the white in the middle, and the red below, should be used for covering a speaker's desk, draping the front of a platform, and for decoration in general.

(e) The flag should never be fastened, displayed, used, or stored in such a manner as will permit it to be easily torn, soiled, or damaged in any way.

(f) The flag should never be used as a covering for a ceiling.

(g) The flag should never have placed upon it, nor on any part of it, nor attached to it any mark, insignia, letter, word, figure, design, picture, or drawing of any nature.

(h) The flag should never be used as a receptacle for receiving, holding, carrying, or delivering anything.

(i) The flag should never be used for advertising purposes in any manner whatsoever. It should not be embroidered on such articles as cushions or handkerchiefs and the like, printed or otherwise impressed on paper napkins or boxes or anything that is designed for temporary use and discard; or used as any portion of a costume or athletic uniform. Advertising signs should not be fastened to a staff or halyard from which the flag is flown.

(j) The flag, when it is in such condition that it is no longer a fitting emblem for display, should be destroyed in a dignified way, preferably by burning.

Sec. 5. That during the ceremony of hoisting or lowering the flag or when the flag is passing in a parade or in a review, all persons present should face the flag, stand at attention, and salute. Those present in uniform should render the military salute. When not in uniform, men should remove the headdress with the right hand

holding it at the left shoulder, the hand being over the heart. Men without hats should salute in the same manner. Aliens should stand at attention. Women should salute by placing the right hand over the heart. The salute to the flag in the moving column should be rendered at the moment the flag passes.

Sec. 6. That when the national anthem is played and the flag is not displayed, all present should stand and face toward the music. Those in uniform should salute at the first note of the anthem, retaining this position until the last note. All others should stand at attention, men removing the headdress. When the flag is displayed, all present should face the flag and salute.

Sec. 7. That the pledge of allegiance to the flag, "I pledge allegiance to the flag of the United States of America and to the Republic for which it stands, one Nation indivisible, with liberty and justice for all," be rendered by standing with the right hand over the heart. However, civilians will always show full respect to the flag when the pledge is given by merely standing at attention, men removing the headdress. Persons in uniform shall render the military salute.

Sec. 8. Any rule or custom pertaining to the display of the flag of the United States of America, set forth herein, may be altered, modified, or repealed, or additional rules with respect thereto may be prescribed, by the Commander-in-Chief of the Army and Navy of the United States, whenever he deems it to be appropriate or desirable; and any such alteration or additional rule shall be set forth in a proclamation.

Approved, December 22, 1942.

The American's Creed*

"I believe in the United States of America as a government of the people, by the people, for the people; whose just powers are derived from the consent of the governed; a democracy in a republic; a sovereign Nation of many sovereign States; a perfect union, one and inseparable; established upon those principles of freedom, equality, justice, and humanity for which American patriots sacrificed their lives and fortunes.

"I therefore believe it is my duty to my country to love it; to support its Constitution; to obey its laws; to respect its flag, and to defend it against all enemies."

The Pledge to the Flag†

"I pledge allegiance to the flag of the United States of America, and to the Republic for which it stands, one Nation, indivisible, with liberty and justice for all."

*William Tyler Page, Clerk of the United States House of Representatives, wrote "The American's Creed" in 1917. It was accepted by the House of Representatives on behalf of the American people on April 3, 1918.

†Written by Francis Belamy in August, 1892, then a member of the editorial staff of *The Youth's Companion* in Boston.

The Star-Spangled Banner

Francis Scott Key, 1814

I

O say, can you see, by the dawn's early light,
What so proudly we hail'd at the twilight's last gleaming?
Whose broad stripes and bright stars, thro' the perilous fight,
O'er the ramparts we watch'd, were so gallantly streaming?
And the rockets' red glare, bombs bursting in air,
Gave proof thro' the night that our flag was still there.
O say, does that star-spangled banner yet wave
O'er the land of the free and the home of the brave?

II

On the shore dimly seen thro' the mists of the deep,
Where the foe's haughty host in dread silence reposes,
What is that which the breeze, o'er the towering steep,
As it fitfully blows, half conceals, half discloses?
Now it catches the gleam of the morning's first beam,
In full glory reflected, now shines on the stream:
'T is the star-spangled banner: O, long may it wave
O'er the land of the free and the home of the brave!

III

And where is that band who so vauntingly swore
That the havoc of war and the battle's confusion,
A home and a country should leave us no more?
Their blood has wash'd out their foul footsteps' pollution.
No refuge could save the hireling and slave
From the terror of flight or the gloom of the grave:
And the star-spangled banner in triumph doth wave
O'er the land of the free and the home of the brave.

IV

O thus be it ever when free-men shall stand
Between their lov'd home and wild war's desolation;
Blest with vict'ry and peace, may the heav'n-rescued land
Praise the pow'r that hath made and preserv'd us a nation!
Then conquer we must, when our cause it is just,
And this be our motto: "In God is our trust!"
And the star-spangled banner in triumph shall wave
O'er the land of the free and the home of the brave!

The Monroe Doctrine

The Monroe Doctrine was announced in President James Monroe's message to Congress, during his second term on December 2, 1823 in part as follows:

"In the discussions to which this interest has given rise, and in the arrangements by which they may terminate, the occasion has been deemed proper for asserting as a principle in which rights and interests of the United States are involved, that the American continents, by the free and independent condition which they have assumed and maintain, are henceforth not to be considered as subjects for future colonization by any European power. . . . We owe it, therefore, to candor and to the amicable relations existing between the

United States and those powers to declare that we should consider any attempt on their part to extend their system to any portion of this hemisphere as dangerous to our peace and safety. With the existing colonies or dependencies of any European power we have not interfered and shall not interfere. But with the governments who have declared their independence and maintain it, and whose independence we have, on great consideration and on just principles, acknowledged, we could not view any interposition for the purpose of oppressing them or controlling in any other manner their destiny by any European power in any other light than as the manifestation of an unfriendly disposition toward the United States."

BIOGRAPHIES OF THE PRESIDENTS

By ARTHUR M. SCHLESINGER, JR.

GEORGE WASHINGTON

was born on February 22 (February 11, old style), 1732, in Westmoreland County, Virginia. His early training was as a surveyor; but in 1752 he was appointed adjutant in the Virginia militia, and for the next three years he took an active part in the wars against the French and Indians, serving as General Braddock's aide, in the disastrous campaign against Fort Duquesne. In 1759 he resigned from the militia, married Martha Dandridge Custis, a widow, and settled down as a gentleman farmer at Mount Vernon.

As a militiaman, he had been exposed to the arrogance of the British officers, and his experience as a planter with British commercial restrictions increased his anti-British sentiment. He opposed the Stamp Act of 1765 and after 1770 became increasingly prominent in organizing resistance. A delegate to the Continental Congress, Washington was selected as commander in chief of the Continental Army and took command at Cambridge, Massachusetts, on July 3, 1775.

Inadequately supported and sometimes covertly sabotaged by the Congress, in charge of troops who were inexperienced, badly equipped and impatient of discipline, Washington conducted the war on the policy of avoiding major engagements with the British and wearing them down by harassing tactics. His able generalship, along with the French alliance and the growing weariness within Britain, brought the war to a conclusion with the surrender of Cornwallis at Yorktown on October 19, 1781.

The chaotic years under the Articles of Confederation led Washington to return to public life in the hope of promoting the formation of a strong central government. He presided over the Constitutional Convention and yielded to the universal demand that he serve as first President. In office, he sought to unite the nation in the service of establishing the authority of new government at home and abroad. Greatly distressed by the emergence of the Hamilton-Jefferson rivalry, he worked to maintain neutrality but actually sympathized more with Hamilton. Following his unanimous reelection in 1792, his second term was dominated by the Federalists. His Farewell Address rebuked the spirit of party and warned against foreign entanglements.

He died at Mt. Vernon on December 14, 1799. Tall, dignified and impressive, Washington gave a public impression of austerity, though he was capable of gaiety in private. His life was characterized by a strict sense of duty to his people, his

state and his nation. The standard biographies are by Fitzpatrick, Ford, Hughes and Stephenson.

JOHN ADAMS

was born on October 30 (October 19, old style), 1735, at Braintree, Massachusetts. A Harvard graduate, he considered teaching and the ministry but finally turned to the law and was admitted to the bar in 1758. He opposed the Stamp Act, served as lawyer for patriots indicted by the British and, by the time of the Continental Congresses, was in the vanguard of the movement for independence. In 1778 he was sent to France. Subsequently he helped negotiate the peace treaty with Britain and in 1785 became the U. S. envoy to London. Resigning in 1788, he was elected Vice President under Washington, and was reelected in 1792.

Though a Federalist, Adams did not get along with Hamilton who sought to prevent his election to the presidency in 1796, and thereafter intrigued against his administration. Adams was chosen with 71 electoral votes to 68 for his closest competitor, Thomas Jefferson, who became Vice President. In 1798 Adams's independent policy averted a war with France but completed the break with Hamilton and the right-wing Federalists while, at the same time, the enactment of the Alien and Sedition Acts, directed against foreigners and against critics of the government, exasperated the Jeffersonian opposition. The split between Adams and Hamilton elected Jefferson in 1800. Adams retired to his home in Quincy, Massachusetts. He later conducted a long correspondence with Jefferson and they died on the same day, July 4, 1826.

Stout, somewhat vain and frascible, Adams was honest, fearless and essentially fair-minded. His *Defence of the Constitution of the United States* (1787) contains original and striking if conservative political ideas. He married Abigail Smith in 1764, and their life together was long and notably happy. The standard biographies are by Morse and Chinard.

THOMAS JEFFERSON

was born on April 13 (April 2, old style), 1743, at Shadwell in Goochland (now Albermarle) County, Virginia. A William and Mary graduate, he studied law but from the start showed an interest in science and philosophy. His literary skill and political clarity brought him to the forefront of the revolutionary movement in Virginia. As delegate to the Continental Congress, he drafted the Declaration of Independence. In 1776 he entered the

Virginia House of Delegates and initiated a comprehensive reform program looking toward the abolition of feudal survivals in land tenure and the separation of church and state.

In 1779 he became governor, but constitutional limitations on his power combined with his own lack of executive energy caused an unsatisfactory administration, culminating in Jefferson's virtual abdication when the British invaded Virginia in 1781. He now retired to his beautiful home at Monticello, to his wife, Martha Wayles Skelton, whom he had married in 1772 and who died in 1782, and to his children.

Jefferson's *Notes on Virginia* (1784-85) illustrate his many-faceted interests, his limitless intellectual curiosity, his deep faith in agrarian democracy. Sent to Congress in 1783, he helped lay down the decimal system and drafted basic reports on the organization of the western lands. In 1785 he was appointed minister to France, where the Anglo-Saxon liberalism he had drawn from Locke was stimulated by contact with the thought which would soon ferment in the French Revolution. In 1790 Washington appointed him Secretary of State. While favoring the Constitution and a strengthened central government, Jefferson came to believe that Hamilton contemplated the establishment of a monarchy. Growing differences resulted in Jefferson's resignation on December 31, 1793.

Elected Vice President in 1796, Jefferson continued to serve as spiritual leader of the opposition to Federalism, particularly to the repressive Alien and Sedition Acts. He was elected President in 1800 by the House of Representatives as a result of Hamilton's decision to throw the Federalist votes to him rather than to Aaron Burr, who had tied him in electoral votes. The purchase of Louisiana from France in 1803, though in violation of his earlier constitutional scruples, was the most notable act of his administration. Reelected in 1804 with 162 electoral votes to 14 for the Federalist Charles C. Pinckney, Jefferson tried desperately during his second term to keep the United States out of the Napoleonic wars in Europe, employing to this end the unpopular embargo policy.

After his retirement to Monticello in 1809, he developed his interest in education, founding the University of Virginia and watching its development with never-flagging interest. He died at Monticello on July 4, 1826. Tall, loose-jointed, a poor speaker, Jefferson had an enormous variety of interests and skills, ranging from education and science to architecture and music. Economically his conception of democracy presupposed an essentially rural community of small freeholds; but his deep and abiding faith in the common man pro-

vides inspiration for future generations. The standard biographies are by Chinard, Bowers, Kimball and Randall.

JAMES MADISON

was born in Port Conway, Virginia, on March 16 (March 5, old style), 1751. A Princeton graduate, he threw himself into the struggle for independence on his return to Virginia in 1771. In the seventies and eighties he was active both in state politics, where he championed the Jefferson reform program, and in the Continental Congress. He was influential in the Constitutional Convention as leader of the group favoring a strong central government and as recorder of the debates; and he subsequently wrote, in collaboration with Alexander Hamilton and John Jay, the *Federalist* papers to aid the campaign for the adoption of the Constitution.

In the new Congress, Madison soon emerged as the leader in the House of the men who opposed Hamilton's financial program and his pro-British leanings in foreign policy. Retiring from Congress in 1797, he continued active in Virginia and drafted the Virginia Resolution protesting the Alien and Sedition Acts. His intimacy with Jefferson made him natural choice for Secretary of State after 1800.

In 1809 Madison succeeded Jefferson as President, with 122 electoral votes to 47 for the Federalist, C. C. Pinckney, and 6 scattering. His attractive wife, Dolly Payne Todd, whom he married in 1794, brought a new social sparkle to the executive mansion. In the meantime, increasing tension with Britain culminated in the War of 1812—a war for which the United States was unprepared, and for which Madison lacked the executive talent to clear out incompetence and mobilize the nation's energies. Madison was reelected in 1812, with 128 electoral votes to 89 for the Federalist, De Witt Clinton. In 1814 the British actually captured Washington and forced Madison to flee to Virginia.

In his domestic program, Madison capitulated to the Hamiltonian policies that he had resisted twenty years before, signing bills to establish a United States Bank and a higher tariff. Following his presidency, he remained in retirement in Virginia until his death on June 28, 1836. Small, wrinkled, unimpressive, Madison had a strong and acute political intelligence but lacked executive force. The standard lives are by Hunt, Brant and Rives.

JAMES MONROE

was born on April 28, 1758, in Westmoreland County, Virginia. A William and Mary graduate, he served in the army during the first years of the Revolution and

was wounded at Trenton. He then entered Virginia and later national politics under the sponsorship of Jefferson. In 1786 he married Eliza Kortright.

Fearing centralization, Monroe opposed the adoption of the Constitution and, as senator from Virginia, was highly critical of the Hamiltonian program. In 1794 he was appointed minister to France where his ardent sympathies with the Revolution exceeded the wishes of the State Department. A troubled diplomatic career ended with his recall in 1796. From 1799 to 1802 he was governor of Virginia. In 1803 Jefferson sent him to France to help negotiate the Louisiana Purchase and for the next few years he was active in various continental negotiations.

In 1808 Monroe flirted with the radical wing of the Republican party, which opposed Madison's candidacy; but the presidential boom came to naught and, after a brief term as governor of Virginia in 1811, Monroe accepted Madison's offer of the State Department. During the war he vainly sought a field command and served as acting Secretary of War in the last stages.

Elected President in 1816 with 183 electoral votes to 34 for the Federalist Rufus King, Monroe, the last of the Virginia dynasty, pursued the course of systematic tranquilization which won for his terms the name "the era of good feelings." Reelected without opposition in 1820, he continued Madison's surrender to the Hamiltonian domestic program, signed the Missouri Compromise, acquired Florida and, with the able assistance of his Secretary of State, John Quincy Adams, promulgated the Monroe Doctrine in 1823, declaring against foreign colonization or intervention in the Americas. He died in New York City on July 4, 1831.

A sound man of medium abilities, Monroe possessed qualities of judgment rather than of leadership. The standard biographies are by Morgan, Gilman and Styron.

JOHN QUINCY ADAMS

was born on July 11, 1767, at Braintree, Massachusetts, the son of John Adams. He spent his early years in Europe with his father, graduated from Harvard and entered law practice. His anti-Jeffersonian newspaper articles won him political attention. In 1794 he became minister to the Netherlands, the first of several diplomatic posts which occupied him until his return to Boston in 1801. In 1797 he married Louisa Catherine Johnson.

In 1803 he was elected to the Senate, nominally as a Federalist, but his repeated displays of independence on such issues as the Louisiana Purchase and the embargo caused his party to compel his resignation and ostracize him socially. In 1809 Madison

rewarded him for his support of Jefferson by appointing him minister to St. Petersburg. He helped negotiate the Treaty of Ghent in 1814 and became minister to London. In 1817 Monroe appointed him Secretary of State where he served with great distinction, gaining Florida from Spain without hostilities and playing an equal part with Monroe in formulating the Monroe Doctrine.

When no presidential candidate received a majority of electoral votes in 1824, Adams, with the support of Henry Clay, was elected in the House over Andrew Jackson who had the original plurality. Adams had ambitious plans of government activity to foster internal improvements and promote the arts and sciences; but congressional obstructionism combined with his own unwillingness or inability to play the role of a politician meant that little was accomplished. Retiring to Quincy after his defeat in 1828, he was elected to the House of Representatives where, though nominally a Whig, he pursued as ever an independent course. He led the fight to force Congress to receive anti-slavery petitions and fathered the Smithsonian Institution.

Stricken on the floor of the House, he died on February 23, 1848. Tactless, brusque, conscientious, a rough and savage debater, Adams spared neither himself nor his enemies. His long and detailed *Diary* gives a unique picture of the personalities and politics of the times. The standard biographies are by Morse and Clark.

ANDREW JACKSON

was born on March 15, 1767, in what is now generally agreed to be Waxhaw, South Carolina. After a turbulent boyhood as an orphan and a British prisoner, he moved west to Tennessee where he soon qualified for law practice but found time for such frontier pleasures as horse racing, cock-fighting and dueling. His marriage to Rachel Overton Robards in 1791 was complicated by subsequent legal uncertainties about the status of her divorce. During the seventeen nineties Jackson served in the Tennessee constitutional convention, the federal House of Representatives, the federal Senate and the Tennessee supreme court.

After some years as a country gentleman, living at the Hermitage near Nashville, Jackson in 1812 was given command of Tennessee troops sent against the Creeks. He defeated the Indians at Horseshoe Bend in 1814; subsequently he became a major general and won the battle of New Orleans over veteran British troops though after the treaty of peace had been signed at Ghent. In 1818 General Jackson invaded Florida, captured Pensacola and hanged two Englishmen named

Arbuthnot and Ambrister, creating an international incident. A presidential boom began for him in 1821 and in its service he returned to the Senate (1823-25). Though he won a plurality of electoral votes, he lost in the House when Clay threw his strength to Adams; but he won easily in 1828 by an electoral vote of 178 to 83.

As President, Jackson greatly expanded the power and prestige of the presidential office and carried through an unexampled program of domestic reform, vetoing the bill to extend the United States Bank, moving toward a hard-money currency policy and checking the program of federal internal improvements. He also vindicated federal authority against South Carolina with its doctrine of nullification and against France on the question of debts. The support given his policies by the workingmen of the East as well as by the farmers of the East, West and South resulted in his triumphant reelection in 1832 over Henry Clay by an electoral vote of 219 to 49, with 18 scattering.

After watching the inauguration of his hand-picked successor, Martin Van Buren, Jackson retired to the Hermitage where he maintained a lively interest in national affairs until his death on June 8, 1845. A tall, dignified man with a drawn and wrinkled face, Jackson has been endowed by partisan historians with a violence and irascibility he appears not to have possessed. His great contribution was to adjust the presidential office and the democratic doctrines of Jefferson to the new situation created by the Industrial Revolution. The standard biographies are by James, Bassett and Parton.

MARTIN VAN BUREN

was born on December 5, 1782, at Kinderhook, New York. After graduating from the village school, he became a law clerk, entered practice in 1803 and soon became active in state politics as state senator and attorney general. In 1821 he was elected to the United States Senate. He threw the support of his efficient political organization, known as the Albany Regency, to William H. Crawford in 1824 and to Jackson in 1828. After leading the opposition to Adams's administration in the Senate, he served briefly as governor of New York and resigned to become Jackson's Secretary of State. He soon became on close personal terms with Jackson and played an important part in turning the Jacksonian program from the times intended by his original Western backers.

In 1832 Van Buren became Vice President; in 1836, President, with an electoral vote of 170 against 124 scattered among four opponents. The Panic of 1837 over-

shadowed his term. He attributed it to the overexpansion of the credit and favored the establishment of an independent treasury as repository for the federal funds. In 1840 he established a ten-hour day on public works. Defeated by Harrison in 1840, he was the leading contender for the Democratic nomination in 1844 until he publicly opposed immediate annexation of Texas and was subsequently beaten by the Southern delegations at the Baltimore convention. This incident increased his growing misgivings about the slave power.

After working behind the scenes among the antislavery Democrats, Van Buren joined in the movement which led to the Free Soil party and became its candidate for President in 1848. He subsequently returned to the Democratic party while continuing to object to its pro-Southern policy. He died in Kinderhook on July 24, 1862. His *Autobiography* throws valuable sidelights on the political history of the times.

Small, erect, dapper, Van Buren had a reputation for slick politicking which won him such sobriquets as the Little Magician and the Red Fox of Kinderhook; but, as his later career showed, he was capable of taking firm and unpopular stands on public issues. His wife Hannah Hoes, whom he married in 1807, died in 1819. The standard biographies are by Shepard and Lynch.

WILLIAM HENRY HARRISON

was born in Charles City County, Virginia, on February 9, 1773. Joining the army in 1791, he was active in Indian fighting in the Northwest, became secretary of the Northwest Territory in 1798 and governor of Indiana in 1800. He married Anna Symmes in 1795. Growing discontent over white encroachments on Indian lands led to the formation of an Indian alliance under Tecumseh to resist further aggressions. In 1811 Harrison won a nominal victory over the Indians at Tippecanoe and in 1813 a more decisive one at the Battle of the Thames, where Tecumseh was killed.

After resigning from the army in 1814, Harrison had an obscure career in politics and diplomacy, ending up in twenty years as a county recorder in Ohio. Nominated for President in 1835 as a military hero whom the conservative politicians hoped to be able to control, he ran surprisingly well against Van Buren in 1836. Four years later he defeated Van Buren by an electoral vote of 234 to 60 but caught pneumonia and died in Washington a month after his inauguration, April 4, 1841. Harrison's qualities were those of a soldier rather than as a statesman or political leader. The standard biographies are by Cleaves and Goebel.

JOHN TYLER

was born in Charles City County, Virginia, on March 29, 1790. A William and Mary graduate, he entered law practice and politics, serving in the House of Representatives (1816-21) and later as governor of Virginia (1825, 1826), and as senator. A thorough-going strict constructionist, he supported Crawford in 1824 and Jackson in 1828 but broke with Jackson over his Bank policy and became a member of the Southern state-rights group which co-operated with the Whigs. In 1836 he resigned from the Senate rather than follow instructions from the Virginia legislature to vote for a resolution expunging censure of Jackson from the Senate record.

Elected Vice President on the Whig ticket in 1840, Tyler succeeded to the presidency on Harrison's death. His strict-constructionist views soon caused a split with the Henry Clay wing of the Whig party and a stalemate on domestic questions. Tyler's more considerable achievements were his support of the Webster-Ashburton treaty with Britain and his success in bringing about the annexation of Texas through joint congressional resolution.

After his presidency he lived in retirement in Virginia until the outbreak of the Civil War when he emerged briefly as chairman of a peace convention and then as delegate to the provisional Congress of the Confederacy. He died on January 18, 1862. He was married first to Letitia Christian March in 1813 and, two years after her death in 1842, to Julia Gardiner. Witty, amiable, courteous, Tyler was a Virginia gentleman whose presidency was hamstrung by the basic contradiction between his own ideas and those of the party which put him on the ticket as Vice President. The standard biographies are by Chitwood and Tyler.

JAMES KNOX POLK

was born in Mecklenburg County, North Carolina, on November 2, 1795. A graduate of the University of North Carolina, he moved west to Tennessee, was admitted to the bar and soon became prominent in state politics. In 1825 he was elected to the House of Representatives where he opposed Adams and, after 1829, became Jackson's floor leader in the fight against the Bank. In 1835 he became Speaker of the House. In 1839 he was elected governor of Tennessee but was beaten in tries for reelection in 1841 and 1843.

The supporters of Van Buren for the Democratic nomination in 1844 counted on Polk as his running mate; but, when Van Buren's stand on Texas alienated Southern support, the convention swung to Polk on the ninth ballot. He was elected over Henry Clay, the Whig candidate, by an

electoral vote of 170 to 105. Rapidly disillusioning those who thought that he would not run his own administration, Polk proceeded steadily and precisely to achieve four major objectives—the acquisition of California, the settlement of the Oregon question, the reduction of the tariff and the establishment of the independent treasury. He also enlarged the Monroe Doctrine to exclude all non-American intervention in American affairs, whether forcible or not, and he forced Mexico into a war which he waged to a successful conclusion. His wife Sarah Childress, whom he married in 1824, was a woman of charm and ability. Polk died in Nashville, Tennessee, on June 15, 1849.

Serious, hardworking, lacking in color, Polk has long been underrated by historians who mistakenly regarded him as a slaveholders' puppet; in fact, few presidents have so thoroughly controlled their own administration or have so ably accomplished the purposes they set for themselves. Polk's *Diary* reflects the mood and problems of his presidency. The standard biography is by McCormac.

ZACHARY TAYLOR

was born at Montebello, Orange County, Virginia, on November 24, 1784. Embarking on a military career in 1808, Taylor fought in the War of 1812, the Black Hawk War and the Seminole War, holding in between garrison jobs on the frontier or desk jobs in Washington. A brigadier general as a result of his victory over the Seminoles at Lake Okechobee (1837), Taylor held a succession of Southwestern commands and in 1846 established a base on the Rio Grande, where his forces engaged in hostilities which precipitated the war with Mexico. He captured Monterey in July, 1846, and, disregarding Polk's orders to stay on the defensive, defeated Santa Anna at Buena Vista in February, 1847, ending the war in the northern provinces.

Though Taylor had never cast a vote for President, his party affiliations were Whiggish, and his availability was increased by his difficulties with Polk. He was elected President over the Democrat Lewis Cass by an electoral vote of 163 to 127. During the revival of the slavery controversy, which was to result in the Compromise of 1850, Taylor began to take an increasingly firm stand against appeasing the South; but he died in Washington on July 9, 1850, in the midst of the fight over the Compromise. He married Margaret Mackall Smith in 1810. His bluff and simple soldierly qualities won him the name of Old Rough and Ready. During his brief term as President he displayed a growing insight into political questions. The standard biographies are by Hamilton and by Bent and McKinley.

MILLARD FILLMORE

was born at Locke, Cayuga County, New York, on January 7, 1800. A lawyer, he entered politics as an Anti-Mason under the sponsorship of Thurlow Weed, editor and party boss, and subsequently followed Weed into the Whig party. He served in the House of Representatives (1832-34 and 1836-42) and played a leading role in writing the tariff of 1842. Defeated for governor of New York in 1844, he became comptroller in 1848, was put on the Whig ticket with Taylor as a concession to the Clay wing of the party and became President upon Taylor's death in 1850.

As President, Fillmore broke with Weed and William H. Seward and associated himself with the pro-Southern Whigs, supporting the Compromise of 1850. Defeated for the Whig nomination in 1852, he ran for President in 1856 as candidate of the American or Know Nothing party, which sought to unite the country against foreigners in the alleged hope of diverting it from the explosive slavery issue. Fillmore opposed Lincoln during the Civil War. He died in Buffalo on March 8, 1874. He was married in 1826 to Abigail Powers, who died in 1853, and in 1858 to Caroline Carmichael McIntosh. Urbane, gracious, colorless and weak, Fillmore was an undistinguished President. The standard biography is by Griffis.

FRANKLIN PIERCE

was born at Hillsborough, New Hampshire, on November 23, 1804. A Bowdoin graduate and lawyer, he won rapid political advancement in the Democratic party, in part because of the prestige of his father, Governor Benjamin Pierce. By 1831 he was Speaker of the New Hampshire House of Representatives; from 1833 to 1837 he served in the federal House and from 1837 to 1842 in the Senate. His wife, Jane Means Hamilton, whom he had married in 1834, disliked Washington and the somewhat dissipated life led by Pierce; and in 1842 Pierce, resigning from the Senate, took up a successful law practice in Concord, New Hampshire.

During the Mexican War Pierce was a brigadier general. Thereafter he continued to oppose antislavery tendencies within the Democratic party. As a result, he was the Southern choice to break the deadlock at the Democratic convention of 1852 and was nominated on the 49th ballot. Pierce polled up 254 electoral votes to 42 for Winfield Scott, the Whig candidate.

As President, Pierce followed a course of appeasing the South at home and of playing with schemes of territorial expansion abroad. The failure of both his foreign and domestic policies prevented his renomination; and he died in Concord, New Hampshire, on October 8, 1869, in relative ob-

scurity. A kindly and courteous person, Pierce was weak, unstable and lacking in presidential qualities. The standard biography is by Nichols.

JAMES BUCHANAN

was born near Mercersburg, Pennsylvania, on April 23, 1791. A Dickinson graduate and a lawyer, he entered Pennsylvania politics as a Federalist. With the disappearance of the Federalist party, he became a Jacksonian Democrat. He served with ability in the House (1820-31), as minister to St. Petersburg (1831-34) and in the Senate (1834-45) and in 1845 became Polk's Secretary of State. Disappointed in the presidential nomination in 1852, Buchanan became minister to Britain where he participated with other American diplomats in Europe in drafting the expansionist Ostend Manifesto.

In 1856 Buchanan received the Democratic nomination and won the election, gaining 174 electoral votes to 114 for John C. Frémont, the Republican candidate, and 8 for Millard Fillmore, American party. The growing crisis over slavery presented Buchanan with problems he lacked the will to tackle. His appeasement of the South alienated the Stephen Douglas wing of the Democratic party without reducing Southern militancy on slavery issues. While denying the right of secession, Buchanan also denied that the federal government could do anything about it. He supported the administration during the Civil War and died in Lancaster, Pennsylvania, on June 1, 1868.

The only President to remain a bachelor throughout his term, Buchanan used his charming niece Harriet Lane as White House hostess. Legalistic, indecisive and timorous as President, Buchanan filled his other public offices capably. The standard biography is by Curtis.

ABRAHAM LINCOLN

was born in Hardin (now Larue) County, Kentucky, on February 12, 1809. His family moved to Indiana and then to Illinois, and Lincoln gained what education he could along the way. While reading law, he worked in a store, managed a mill, surveyed and split rails. In 1834 he went to the state legislature as a Whig and became the party's floor leader. For the next twenty years he remained in law practice in Springfield, except for a single term (1847-49) in Congress where he denounced the Mexican War. In 1855 he was a candidate for senator and in 1856 he joined the new Republican party.

A leading but unsuccessful candidate for the vice-presidential nomination with Frémont, Lincoln gained national attention in 1858 when, as Republican candidate for

senator from Illinois, he engaged in a series of debates with Stephen A. Douglas, the Democratic candidate. He lost the senatorial election, but continued to prepare the way for the 1860 Republican convention and was rewarded with the presidential nomination on the third ballot. He polled 180 electoral votes, as against the 123 of his three opponents, but had only a plurality of the popular vote.

From the start, Lincoln made clear that, unlike Buchanan, he believed the national government had the power to crush the rebellion. Not an abolitionist, he held the slavery issue subordinate to that of preserving the Union but soon perceived that the war could not be brought to a successful conclusion without freeing the slaves. His administration was hampered by the incompetence of many Union generals, the inexperience of the troops and the harassing political tactics both of the Republican Radicals, who favored a hard policy toward the South, and the Democratic Copperheads, who desired a negotiated peace. The Gettysburg Address of November 19, 1863, marks the high point in the record of American eloquence. His patient search for a winning combination finally brought Generals Ulysses S. Grant and William T. Sherman to the top; and their series of victories in 1864 dispelled the mutterings from both Radicals and Peace Democrats which at one time seemed to threaten Lincoln's reelection. He received 221 electoral votes to 21 for George B. McClellan, the Democratic candidate. His inaugural address urged leniency toward the South: "with malice toward none; with charity for all, let us strive on to finish the work we are in; to bind up the nation's wounds." This policy aroused growing opposition on the part of the Republican Radicals, but Lincoln was assassinated by John Wilkes Booth at Ford's Theater, Washington, on April 14, 1865, before the matter could be put to test.

Lincoln's marriage to Mary Todd in 1842 was often unhappy and turbulent, in part because of his wife's pronounced instability. By his remarkable literary artistry, his essential patience and devotion, his profound sense of the importance of government by, for and of the people, by the manner of his life and of his death, Lincoln has won a unique place in the hearts of Americans. The standard biographies are by Sandburg, Herndon, Nicolay and Hay.

ANDREW JOHNSON

was born at Raleigh, North Carolina, on December 29, 1808. Self-educated, he became a tailor in Greeneville, Tennessee, but soon went into politics where he rose steadily. From 1843 to 1853 he served in the House of Representatives, 1853-57 as governor of Tennessee and in 1857 was

elected Senator. Politically he was a Jacksonian Democrat, and his specialty was the fight for a more equitable land policy. Alone among the Southern Senators, he stood by the Union during the Civil War. In 1862 he became war governor of Tennessee and carried out a thankless and difficult job with great courage. Johnson became Lincoln's running mate in 1864 as result of an attempt to give the ticket a nonpartisan and nonsectional character. Succeeding to the presidency on Lincoln's death, Johnson sought to carry out his policy but without his political skill. The result was a hopeless conflict with the Radical Republicans who dominated Congress, passed measures over Johnson's vetoes and attempted to limit the power of the executive concerning appointments and removals. The conflict culminated with Johnson's impeachment for attempting to remove his disloyal Secretary of War in defiance of the Tenure of Office Act which required senatorial concurrence for such dismissals. The opposition failed by one vote to get the two-thirds necessary for conviction.

After his presidency, Johnson maintained an interest in politics and in 1874 was elected to the Senate. He died near Carter Station, Tennessee, on July 31, 1875. He married Eliza McCardle in 1827. An honest, courageous and intelligent man, Johnson lacked the tact, patience and self-control to be an effective President. The standard biographies are by Winston, Stryker and Milton.

ULYSSES SIMPSON GRANT

was born (as Hiram Ulysses Grant) at Point Pleasant, Ohio, on April 27, 1822. He finished West Point in 1843 and served without particular distinction in the Mexican War. In 1848 he married Julia Dent. He resigned from the army in 1854, following warnings from his commanding officer about his drinking habits, and for the next six years held a wide variety of jobs in the Middle West. With the outbreak of the Civil War, he sought a command and soon, to his surprise, was made a brigadier general. His continuing successes in the western theaters, culminating in the capture of Vicksburg in 1863, brought him national fame and soon the command of all the Union armies. His dogged, implacable policy of concentrating on dividing and destroying the Confederate armies brought the war to an end in 1865. In 1866 he was made full general.

Grant's relations with Johnson grew steadily worse; and in 1868, as the Republican candidate for President, Grant was elected with 214 electoral votes to 80 for the Democrat Horatio Seymour. From the start Grant showed his unfitness for the office. His cabinet was weak, his do-

mestic policy was confused, many of his intimate associates were corrupt. The notable achievement in foreign affairs was the settlement of controversies with Great Britain in the Treaty of London (1871), negotiated by his able Secretary of State, Hamilton Fish.

Nominated for a second term, he defeated Horace Greeley, the Liberal Republican candidate, 286 votes to 63. The Panic of 1873 created difficulties for his second term.

After retiring from office, Grant toured Europe for two years and returned in time to accede to a third-term boom, but was beaten in the convention of 1880. Illness and bad business judgment darkened his last years, but he worked steadily at the *Personal Memoirs* which were to be so successful when published after his death at Mount McGregor, near Saratoga, New York, on July 23, 1885. Inarticulate, taciturn, loyal to his friends, he was an able general who should never have accepted the presidency. The standard biographies are by Hesseltine and Woodward.

RUTHERFORD BIRCHARD HAYES

was born at Delaware, Ohio, on October 4, 1822. A graduate of Kenyon College and the Harvard Law School, he practiced law in Sandusky and then in Cincinnati, Ohio. In 1852 he married Lucy Webb. A Whig, he joined the Republican party in 1855. During the Civil War he rose to the rank of major general. He served in Congress from 1864 to 1867 and then confirmed a reputation for honesty and efficiency in two terms as governor of Ohio. His return to the governorship in 1875 made him the logical candidate for those Republicans who wished to stop James G. Blaine in 1876; and he was successfully nominated.

The result of the election was for some time in doubt and hinged upon disputed returns from South Carolina, Louisiana, Florida and Oregon. Samuel J. Tilden, the Democratic candidate, had the larger popular vote but was adjudged by the strictly partisan decisions of the Electoral Commission to have one less electoral vote, 185 to 184. The national acceptance of this result was due in part to the general understanding that Hayes would pursue a conciliatory policy toward the South. He withdrew the troops from the South, took a conservative position on financial and labor issues and urged civil-service reform.

Hayes served only one term by his own wish and spent the rest of his life in various humanitarian endeavors. He died in Fremont, Ohio, on January 17, 1893. A hard-working, conscientious, sensible man, Hayes represented the best type of Republican of his day. The standard biographies are by Eckenrode and Williams.

JAMES ABRAM GARFIELD,

the last President to be born in a log cabin, was born at Cuyahoga County, Ohio, on November 19, 1831. A Williams graduate, he taught school for a time and entered Republican politics in Ohio. In 1858 he married Lucretia Rudolph. During the Civil War he had a promising career, rising to the rank of major general of volunteers; but in 1863 he was elected to the House of Representatives where he served until 1880. His oratorical and parliamentary abilities soon made him the leading Republican in the House, though his record was marred by his unorthodox acceptance of a fee in the DeGolyer paving contract case and by suspicions of his complicity in the Credit Mobilier scandal.

In 1880 Garfield was elected to the Senate; but instead became the presidential candidate on the 36th ballot as a result of a deadlock in the Republican convention. He gained 214 electoral votes to 155 for General Winfield Scott Hancock, the Democratic candidate. Garfield's administration was barely under way when he was shot by Charles J. Guiteau, a disappointed office seeker, in July. He died in Elberon, New Jersey, on September 19, 1881. An attractive and eloquent man, he was much beloved in his day. The standard biographies are by Smith and Caldwell.

CHESTER ALAN ARTHUR

was born at Fairfield, Vermont, on October 5, 1830. A graduate of Union College, he became a successful New York lawyer. In 1859 he married Ellen Herndon. During the Civil War he held administrative jobs in the Republican state administration and in 1871 was appointed collector of the Port of New York by Grant. This post gave him control over considerable patronage; and, though not personally corrupt, Arthur managed his power in the interests of the New York machine so openly that President Hayes in 1877 called for an investigation and suspended Arthur from his responsibilities.

In 1880 Arthur was nominated for Vice President in the hope of conciliating the followers of Grant and the powerful New York machine. As President on Garfield's assassination, Arthur, stepping out of his familiar role as spoilsman, backed civil-service reform, reorganized the cabinet and prosecuted political associates accused of post office graft. Losing machine support and failing to gain the reformers, he was not renominated. He died in New York City on November 18, 1886. A tall, handsome, dignified man with real administrative abilities, he was a better President than his previous record promised. The standard biography is by Howe.

(STEPHEN) GROVER CLEVELAND

was born at Caldwell, New Jersey, on March 18, 1837. He was admitted to the bar in Buffalo, New York, in 1859 and lived there as a lawyer, with occasional incursions into Democratic politics, for more than twenty years. He did not participate in the Civil War. As mayor of Buffalo in 1881, he carried through a reform program so ably that the Democrats ran him successfully for governor in 1882. In 1884 he won the Democratic nomination for President. The campaign contrasted Cleveland's spotless public career with the uncertain record of James G. Blaine, the Republican candidate, and Cleveland received enough Mugwump (Independent Republican) support to win by 219 to 182 electoral votes.

As President, Cleveland pushed civil-service reform, opposed the pension grab and attacked the high tariff rates. While in the White House he married Frances Folsom (1886). Renominated in 1888, Cleveland was defeated by Benjamin Harrison, polling more popular but fewer electoral votes. In 1892 he was reelected over Harrison, 277 to 145, with 22 votes for James B. Weaver, the Populist candidate. When the Panic of 1893 burst upon the country, Cleveland's attempts to solve it by sound-money measures alienated the free-silver wing of the party, while his tariff policy alienated the protectionists. In 1894 he sent troops to break the Pullman strike. In foreign affairs his firmness caused Great Britain to back down in the Venezuela border dispute.

In his last years Cleveland was an active and much respected public figure. He died in Princeton, New Jersey, on June 24, 1908. An honest, stubborn, high-principled man, Cleveland was an old-fashioned liberal in the nineteenth-century sense who was baffled by the new problems of industrial society. The standard biographies are by Nevins and McElroy.

BENJAMIN HARRISON

was born in North Bend, Ohio, on August 20, 1833, the grandson of William Henry Harrison. A graduate of Miami University, he took up the law in Indiana and became active in Republican politics. In 1853 he married Caroline Lavinia Scott. During the Civil War he rose to the rank of brigadier general. A sound-money Republican, he was elected senator from Indiana in 1881 and in 1888 received the Republican nomination for President on the 8th ballot. Though behind on the popular vote, he won over Grover Cleveland in the electoral college by 233 to 168.

As President, Benjamin Harrison failed to please either the bosses or the reform element in the party. In foreign affairs he backed Secretary of State Blaine whose policy foreshadowed later American im-

perialism. In 1892 Harrison was renominated, but Cleveland beat him in the election. His wife died in the White House in 1892, and Harrison married her niece, Mary Scott (Lord) Dimmick, in 1896. After his presidency, he resumed law practice. He died in Indianapolis, Indiana, on March 13, 1901. Harrison was an honest man of very medium abilities.

WILLIAM MCKINLEY

was born in Niles, Ohio, on January 29, 1843. A graduate of Allegheny College, he rose from the ranks to become a major in the Civil War. Subsequently he opened a law office in Canton, Ohio, and in 1871 married Ida Saxton. Elected to Congress in 1876, he served there steadily till 1890 except for 1884-86. His faithful advocacy of business interests culminated in the passage of the highly protective McKinley Tariff of 1890. With the support of Mark Hanna, a shrewd Cleveland businessman interested in safeguarding tariff protection, McKinley became governor of Ohio in 1891 and Republican presidential candidate in 1896. The business community, alarmed by the progressivism of William Jennings Bryan, the Democratic candidate, spent considerable money to assure McKinley's victory which was by the margin of 271 to 176 in the electoral college.

The chief event of McKinley's administration was the war with Spain which resulted in our acquisition of the Philippines and other islands. With imperialism as an issue, McKinley defeated Bryan again in the election of 1900 by 292 to 155. On September 6, 1901, he was shot at Buffalo by Leon F. Czolgosz, an anarchist, and he died there on September 14. McKinley was a characteristic Republican politician dedicated to the service of the business community. The standard biography is by Olcott.

THEODORE ROOSEVELT

was born in New York City on October 27, 1858. A Harvard graduate, he was early interested in ranching, in politics and in writing picturesque historical narratives. He was a Republican member of the New York Assembly, 1882-84, an unsuccessful candidate for mayor of New York in 1888, a U. S. Civil Service Commissioner under Harrison, in 1895 Police Commissioner of New York City, and in 1897 Assistant Secretary of the Navy under McKinley. After exuding a belligerence which helped bring on the war with Spain, he resigned in 1898 to help organize a volunteer regiment named the Rough Riders and take a more direct part in the war. Always publicity-shrewd, he won the New York gubernatorial nomination in 1898 in spite of pronounced lack of enthusiasm on the part of the bosses.

After two years of T.R. in Albany, the New York bosses succeeded in getting him the vice-presidential nomination in 1900. Roosevelt accepted it with reluctance, feeling that his career had been ruined. As President on McKinley's assassination, he perceived the new popular mood of progressivism and initiated a policy of trust-busting, designed to control giant corporations. He also strengthened government powers over interstate commerce and launched a conservation program to save natural resources. In foreign affairs he pursued a truculent policy, permitting the instigation of a revolt in Panama to dispose of Colombian objections to the Panama Canal and helping to maintain the balance of power in the East by bringing the Russo-Japanese war to an end. In 1904 he decisively defeated Alton B. Parker, his conservative Democratic opponent, by an electoral margin of 336 to 140.

Following his second term he went big-game hunting in Africa and toured Europe. On his return to the United States, his increasing coldness toward Taft led him to overlook his earlier disclaimer of third-term ambitions and to reenter politics. Defeated by the machine in the Republican convention of 1912, he organized the Progressive party and polled more votes than Taft, though the split brought about the election of Wilson. From 1915 on Roosevelt strongly favored intervention in the European war. He became deeply embittered at Wilson's refusal to allow him to raise a volunteer division. He died in Oyster Bay, New York, on January 6, 1919. He was married twice: in 1880 to Alice Hathaway Lee, who died in 1884; and in 1886 to Edith Kermit Carow.

The athletic advocate of the strenuous life, with his high voice, prominent teeth and thick glasses, Roosevelt captured the imagination of the American people. More sober judgment suggests that, so far as his progressivism was concerned, his bark was worse than his bite, but he was one of the great personalities of American history. The standard biography is by Pringle.

WILLIAM HOWARD TAFT

was born in Cincinnati, Ohio, on September 15, 1857. A Yale graduate, he entered Ohio Republican politics in the eighteen thirties. In 1886 he married Helen Herron. From 1887 to 1890, he served on the Ohio superior court; 1890-92, as solicitor general of the United States; 1892-1900, on the federal circuit court. In 1900 McKinley appointed him president of the Philippine Commission and in 1901 governor general. Taft had great success in pacifying the Filipinos, solving the problem of the church lands, improving economic conditions and establishing limited self-govern-

ment. His period as Secretary of War 1904-08 further demonstrated his capacity as administrator and conciliator; and he was Roosevelt's hand-picked successor in 1908. In the election he polled 321 electoral votes to 162 for William Jennings Bryan.

As President, though he carried on many of Roosevelt's policies, Taft got into increasing trouble with the progressive wing of the party and displayed mounting irritability and indecision. After his defeat in 1912, he became professor of constitutional law at Yale. In 1921 he was appointed Chief Justice of the United States. He died in Washington on March 8, 1930. Enormously large, deliberate and good-humored, Taft excelled as an administrator and judge, not as a political leader. The standard biography is by Pringle.

(THOMAS) WOODROW WILSON

was born in Staunton, Virginia, on December 28, 1856. A Princeton graduate, he turned from law practice to post-graduate work in political science at Johns Hopkins University, receiving his Ph.D. in 1886. He taught at Bryn Mawr, Wesleyan and Princeton, and in 1902 was made president of Princeton. After an unsuccessful attempt to democratize the social life of Princeton, he welcomed an invitation in 1910 to be the Democratic gubernatorial candidate in New Jersey. His success in fighting the machine and putting through a reform program attracted national attention.

In 1912, after a protracted contest at Baltimore, Wilson won the Democratic nomination on the 46th ballot. In the election he received 435 electoral votes to 88 for Roosevelt and 8 for Taft. During his first term Wilson proceeded under the standard of the New Freedom to enact a program of domestic reform, including the Federal Reserve Act, the Clayton Anti-Trust Act, the establishment of the Federal Trade Commission and other measures designed to restore competition in the face of the great monopolies. In foreign affairs, while privately sympathetic with the Allies, he strove to maintain strict neutrality in the European war and warned both sides against encroachments on American interests.

Reelected in 1916 as a peace candidate, he tried to mediate between the warring nations; but, when the Germans resumed unrestricted submarine warfare in 1917, Wilson brought the United States into what he now believed was a war to make the world safe for democracy. He supplied the classic formulations of Allied war aims, and the armistice of November, 1918, was negotiated on the basis of Wilson's Fourteen Points. In 1919 he strove at Versailles to lay the foundations for enduring peace.

He accepted the imperfections of the Versailles Treaty in the expectation that they could be remedied by action within the League of Nations. He probably could have secured ratification of the treaty if he had adopted a more conciliatory attitude toward the mild reservationists; but his insistence on all or nothing eventually caused the diehard isolationists and diehard Wilsonites to unite in rejecting a compromise.

In September, 1919, Wilson suffered a paralytic stroke which limited his future activity. After the presidency he lived on in retirement in Washington, dying February 3, 1924. He was married twice—in 1885 to Ellen Louise Axson, who died in 1914, and in 1915 to Edith Bolling Galt. A man of high principle, inspiring eloquence and great intellectual ability, Wilson was the first leader to fire the imagination of the masses of the world with the vision of world peace. The standard biography is by Baker.

WARREN GAMALIEL HARDING

was born in Warren County, Ohio, on November 2, 1865. After attending Ohio Central College, Harding became interested in journalism and in 1885 bought the *Marion (Ohio) Star*. In 1891 he married a wealthy widow, Florence Kling De Wolfe. As his paper prospered, he entered Republican politics, serving as state senator, (1898-1902), and as lieutenant governor, (1902-04). In 1910 he was defeated for governor but in 1914 was elected to the Senate. His reputation as orator made him keynoter in the 1916 convention.

When the 1920 Republican convention was deadlocked between Leonard Wood and Frank O. Lowden, Harding was made the dark-horse nominee on his solemn affirmation that there was no reason in his past that he should not be. Straddling the League question, Harding was elected easily, with 404 electoral votes to 127 for James M. Cox, his Democratic opponent. His cabinet contained some able men, but also some manifestly unfit for public office. Harding's own intimates were mediocre when they were not corrupt. The impending disclosure of scandals in the Interior and Justice departments and in the Veterans Bureau, as well as political setbacks, profoundly worried him. On his return from Alaska in 1923, he died suddenly at San Francisco on August 2. A handsome and genial man, undiscriminating in his associates, lacking in political ideas or fortitude, Harding was totally unfitted for the presidency.

(JOHN) CALVIN COOLIDGE

was born in Plymouth Notch, Vermont, on July 4, 1872. An Amherst graduate, he went

into law practice at Northampton, Massachusetts, in 1898. He married Grace Anna Goodhue in 1905. He entered Republican state politics, becoming successively mayor of Northampton, state senator, lieutenant governor and, in 1918, governor. His conduct in regard to the Boston police strike in 1919 won him a somewhat undeserved reputation for decisive action and brought him the Republican vice-presidential nomination in 1920. After Harding's death Coolidge handled the Washington scandals with care and finally managed to save the Republican party from public blame for the widespread corruption.

In 1924 Coolidge won reelection without difficulty, getting 382 electoral votes to 136 for the Democrat, John W. Davis, and 13 for Robert M. La Follette running on the Progressive ticket. His second term, like his first, was characterized by deference to big business, indifference to the underprivileged and a general satisfaction with the existing economic order. He stated that he did not choose to run in 1928, but he may have hoped to be drafted anyway.

After his presidency, Coolidge lived quietly in Northampton, writing an unilluminating *Autobiography* and conducting a syndicated column. He died in Northampton, Massachusetts, on January 5, 1933. His dry, Yankee humor, his frugality and glumness made him a paradoxically popular President in the boom period. The standard biographies are by White and Fuess.

HERBERT (CLARK) HOOVER

was born at West Branch, Iowa, on August 10, 1874. A Stanford graduate, he worked from 1895 to 1913 as a mining engineer and consultant in North America, Europe, Asia, Africa and Australia. In 1899 he married Lou Henry. During the First World War he served with distinction as chairman of the American Relief Committee in London, as chairman of the Committee for Relief in Belgium and as United States Food Administrator. His political affiliations were still sufficiently indeterminate for him to be mentioned as a possibility for both Republican and Democratic nominations in 1920; but after the election he served both Harding and Coolidge as Secretary of Commerce.

In the election of 1928 Hoover received 444 electoral votes to 87 for Alfred E. Smith, the Democratic candidate. He soon faced the worst depression in the nation's history; but his attack upon it was hampered by his devotion to the theory that the forces which brought the crisis would soon bring the revival and then by his belief that in too many areas the federal government had no power to act. In a succession of vetoes he struck down measures proposing a national employment

system or national relief; he reduced income tax rates; and only at the end of his term did he yield to popular pressure and set up agencies to make emergency loans (mostly to large business).

After his defeat in 1932, Hoover occupied himself with private business and with books and speeches attacking the New Deal. President Truman brought him back into official life by charging him in 1946 with various missions concerning the world food situation.

FRANKLIN DELANO ROOSEVELT

was born in Hyde Park, New York, on January 30, 1882. A Harvard graduate, he attended Columbia Law School and was admitted to the New York bar. In 1910 he was elected to the New York state senate as a Democrat. Re-elected in 1912, he was appointed Assistant Secretary of the Navy by Woodrow Wilson in 1913. In 1920 his radiant personality and his war services resulted in his nomination for Vice President as James M. Cox's running mate. After his defeat, he returned to law practice in New York. In August, 1921, Roosevelt was stricken with infantile paralysis while at Campobello, New Brunswick. After a long and gallant fight against the disease he recovered partial use of his legs. In 1924 and 1928 he led the fight at the Democratic national conventions for the nomination of Governor Alfred E. Smith of New York; and in 1928 Roosevelt was himself induced to run for governor of New York. He was elected and was re-elected in 1930.

In 1932 Roosevelt received the Democratic nomination for President and immediately launched on a campaign which brought new spirit to a weary and discouraged nation. He won the election over Herbert Hoover by a margin of 472 to 59 in the electoral college. His first term was characterized by an unfolding of the New Deal program, with greater benefits for labor, the farmers and the unemployed and the progressive estrangement of most of the business community.

At an early stage Roosevelt became aware of the menace to world peace involved in the existence of totalitarian fascism and from 1937 on he tried to focus public attention on the trend of events in Europe and Asia. As a result he was widely denounced as a warmonger. He was re-elected in 1936 over Alfred M. Landon by the overwhelming electoral margin of 523 to 8; and the gathering international crisis caused him to decide to run again in 1940, when he defeated Wendell L. Willkie, 449 to 82.

Roosevelt's program to bring maximum aid to Britain and, after June, 1941, to Russia was bitterly opposed by a small but organized minority, until the Japanese

attack on Pearl Harbor restored national unity. During the war Roosevelt shelved the New Deal in the interests of conciliating the business community, both in order to get full production during the war and to prepare the way for a united acceptance of the peace settlements after the war. A series of conferences with Winston Churchill and Joseph Stalin laid down the bases for the postwar world. In 1944 he was elected to a fourth term, with 432 electoral votes to 99 for Governor Thomas Dewey.

On April 12, 1945, Roosevelt died at Warm Springs, Georgia, shortly after his return from the Yalta conference. His wife, Anna Eleanor Roosevelt, whom he married in 1905, is a woman of great ability who made significant contributions to her husband's policies. No President has been faced with so many staggering responsibilities, both at home and abroad, as Franklin Roosevelt. His success in bringing America safely through the greatest depression and the greatest war in world history was an accomplishment of the highest statesmanship; and his buoyant, fighting personality has left an indelible impression upon the national imagination.

HARRY S. TRUMAN

was born on a farm near Lamar, Missouri, on May 8, 1884. During the First World War he served in France with the 129th Field Artillery. After engaging briefly and unsuccessfully in the haberdashery business in Kansas City, Truman entered local politics. Under the sponsorship of Thomas Pendergast, Democratic boss of Missouri, he held a number of local offices, preserving his personal honesty in the midst of a notoriously corrupt political machine. In 1934 he was elected to the Senate and was re-elected in 1940. During his first term he was a loyal but quiet supporter of the New Deal; but in the course of his second term an appointment as head of a Senate committee to investigate war production brought to the surface his special qualities of honesty, common sense and hard work, and he won widespread respect.

When opposition developed to the re-nomination of Henry Wallace for Vice President in 1944, Roosevelt, who doubtless had in mind the importance of conciliating the Senate for the ratification of the peace settlement, indicated that Truman would be acceptable. Since Roosevelt's death, Truman has nominally sought to continue the Roosevelt policies, but the New Dealers in the key Washington jobs have gradually been replaced by politicians and businessmen in a more orthodox tradition, many of them hailing from Missouri. Truman married Bess Wallace in 1919.

U. S. Cabinet Heads with Dates of Appointment, 1789 to 1946

President	Secretary of State	Secretary of War	Secretary of the Treasury	Secretary of the Navy	Attorney-General	Postmaster-General
Washington	John Jay	Henry Knox	Alexander Hamilton		Edmund Randolph	Samuel Osgood
Washington	Thomas Jefferson	Timothy Pickens	Oliver Wolcott, Jr.		William Bradford	Timothy Pickens
Washington	Edmund Randolph	James McHenry			Charles Lee	Joseph Habersham
Washington	Timothy Pickens					
Adams	Timothy Pickens	James McHenry	Oliver Wolcott, Jr.	Benjamin Stoddert	Charles Lee	Joseph Habersham
Adams	John Marshall	Samuel Dexter	Samuel Dexter			
Jefferson	James Madison	Henry Dearborn	Albert Gallatin	Benjamin Stoddert	Levi Lincoln	Joseph Habersham
Jefferson				Robert Smith	John Breckinridge	Gideon Granger
Madison	Robert Smith	William Eustis	George W. Campbell	Paul Hamilton	Cassat A. Rodney	Gideon Granger
Madison	James Monroe	John Armstrong	Alexander J. Dallas	William Jones	William Pinkney	Return J. Meigs, Jr.
Madison	James Monroe	William H. Crawford	William H. Crawford	B. W. Crowninshield	Richard Rush	Return J. Meigs, Jr.
Monroe	John Quincy Adams	Geo. Graham (and in.)	William H. Crawford	B. W. Crowninshield	Richard Rush	Return J. Meigs, Jr.
Monroe		John C. Calhoun		Smith Thompson	William Wirt	John McLean
Monroe				Samuel L. Southard		
Monroe	Henry Clay	James Barbour	Richard Rush	Samuel L. Southard	William Wirt	John McLean
J. Q. Adams	J. Q. Adams	Peter B. Porter				
J. Q. Adams		John H. Eaton	Samuel D. Ingham	John Branch	John McP. Berrien	William T. Barry
Jackson	Martin Van Buren	Lewis Cass	Louis McLane	Lewis Woodbury	Roger B. Taney	Amos Kendall
Jackson	Edward Livingston	Benjamin F. Butler	William J. Duane	Mahlon Dickerson	Benjamin F. Butler	
Jackson	Louis McLane		Roger B. Taney			
Jackson	John Forsyth		Levi Woodbury	Mahlon Dickerson		
Jackson		Joel R. Poinsett	Levi Woodbury	James K. Paulding	Benjamin F. Butler	Amos Kendall
Van Buren	John Forsyth				Felix Grundy	John M. Niles
Van Buren					Henry D. Gilpin	
Harrison	Daniel Webster	John Bell	Thomas Ewing	George E. Badger	John J. Crittenden	Francis Granger
Tyler	Daniel Webster	John C. Spencer	Thomas Ewing	George E. Badger	John J. Crittenden	Francis Granger
Tyler	Hugh S. Legare	James M. Porter	Walter Forward	Abel P. Upshur	Hugh S. Legare	Chas. A. Wickliffe
Tyler	Abel P. Upshur	William Wilkins	John C. Spencer	David Henshaw	John Nelson	
Tyler	John C. Calhoun		George M. Bibb	Thomas W. Gilmer		
Tyler				John Y. Mason		
Polk	James Buchanan	William L. Marcy	Robert J. Walker	George Bancroft	John Y. Mason	Cave Johnson
Polk				John Y. Mason	Nathan Clifford	
Polk				Isaac Toucey	Isaac Toucey	Jacob Collamer
Taylor	John M. Clayton	George W. Crawford	William M. Meredith	William B. Preston	Reverdy Johnson	Nathan K. Hall
Fillmore	Daniel Webster	Charles M. Conrad	Thomas Corwin	William A. Graham	John J. Crittenden	Sam'l D. Hubbard
Fillmore	Edward Everett			John P. Kennedy		James Campbell
Pierce	William L. Marcy	Jefferson Davis	James Guthrie	James C. Dobbin	Caleb Cushing	Aaron V. Brown
Buchanan	Lewis Cass	John B. Floyd	Howell Cobb	Isaac Toucey	Jeremiah S. Black	Joseph Holt
Buchanan	Jeremiah S. Black	Joseph Holt	Phillip F. Thomas		Edwin M. Stanton	Huratio King
Buchanan			John A. Dix			

1-Jay, Secretary for Foreign Affairs under the Confederation, continued as Secretary of State until Jefferson returned from Europe March 21, 1790.

President	Secretary of State	Secretary of War	Secretary of the Treasury	Secretary of the Navy	Attorney-General	Postmaster-General
Lincoln.....	William H. Seward.....1861	Simon Cameron.....1861	Salmon P. Chase.....1861	Gideon Welles.....1861	Edward Bates.....1861	Montgomery Blair.....1861
Lincoln.....		Edwin M. Stanton.....1862	William P. Fessenden.....1864		James Speed.....1864	William Dennison.....1864
Johnson.....	William H. Seward.....1865	U. S. Grant (ad. in.).....1867	Hugh McCulloch.....1865	Gideon Welles.....1865	James Speed.....1865	William Dennison.....1865
Johnson.....		John M. Schofield.....1868			Henry Stanbery.....1866	Alex W. Randall.....1866
Grant.....	Elihu B. Washburne.....1869	John A. Rawlins.....1869	George S. Boutwell.....1869	Adolph E. Borie.....1869	William M. Everts.....1868	John J. Creswell.....1869
Grant.....	Hamilton Fish.....1869	William T. Sherman.....1869	Wm. A. Richardson.....1873	George M. Robeson.....1869	Ebenezer R. Hoar.....1869	James W. Marshall.....1874
Grant.....		William W. Belknap.....1869	Benjamin H. Bristow.....1874		Amos T. Akerman.....1870	Marshall Jewell.....1874
Grant.....		Alphonso Taft.....1876	Lot M. Morrill.....1876		George H. Williams.....1871	James N. Tyner.....1876
Grant.....		James Don. Cameron.....1876			Edward's Pierpont.....1875	
Hayes.....	William M. Everts.....1877	George W. McCrary.....1877	John Sherman.....1877	R. W. Thompson.....1877	Alphonso Taft.....1876	Davis McK. Key.....1877
Hayes.....		Alexander Ramsey.....1879		Nathan Goff, Jr.....1881	Charles Devens.....1877	Horace Maynard.....1880
Garfield.....	James G. Blaine.....1881	Robert T. Lincoln.....1881	William Windom.....1881	William H. Hunt.....1881	Wayne MacVeagh.....1881	Thomas L. James.....1881
Arthur.....	F. T. Frelinghuysen.....1881		Charles J. Folger.....1881	William E. Chandler.....1882	Ben. H. Brewster.....1881	Timothy O. Howe.....1881
Arthur.....			Walter Q. Gresham.....1884			Walter Q. Gresham.....1883
Cleveland.....		William C. Endicott.....1885	Hugh McCulloch.....1884	William C. Whitney.....1885	Augustus H. Garland.....1885	Frank Hatton.....1884
Cleveland.....	Thomas F. Bayard.....1885		Daniel Manning.....1885			William F. Vilas.....1885
B. Harrison.....	James G. Blaine.....1889	Redfield Proctor.....1889	Charles S. Fairchild.....1887	Benjamin F. Tracy.....1889	William H. H. Miller.....1889	Don M. Dickinson.....1888
B. Harrison.....	John W. Foster.....1892	Stephen B. Elkins.....1891	William Windom.....1889	Hilary A. Herbert.....1893		John Wanamaker.....1889
Cleveland.....	Walter Q. Gresham.....1893	Daniel S. Lamont.....1893	Charles Foster.....1891			Wilson S. Bissel.....1893
Cleveland.....	Richard Olney.....1895		John G. Carlisle.....1893	John D. Long.....1897	Richard Olney.....1893	William L. Wilson.....1895
McKinley.....	John Sherman.....1897	Russell A. Alger.....1897	Lyman J. Gage.....1897		Joseph McKenna.....1897	James A. Gary.....1897
McKinley.....	William R. Day.....1898	Elthu Root.....1899		William H. Moody.....1902	John W. Griggs.....1898	Charles E. Smith.....1898
McKinley.....	John Hay.....1898			Paul Morton.....1904	Philander C. Knox.....1901	Henry C. Payne.....1902
Roosevelt.....	Elthu Root.....1905	William H. Taft.....1904	Leslie M. Shaw.....1902	Charles J. Bonaparte.....1905	William H. Moody.....1904	Robert J. Wynne.....1904
Roosevelt.....	Robert Bacon.....1909	Luke E. Wright.....1908	George B. Cortelyou.....1907	Victor H. Metcalf.....1906	Charles J. Bonaparte.....1906	Geo. B. Cortelyou.....1905
Roosevelt.....				T. H. Newberry.....1908		Geo. von L. Meyer.....1907
Roosevelt.....			Franklin MacVeagh.....1909	George von L. Meyer.....1909	Geo. W. Wickersham.....1909	Frank H. Hitchcock.....1909
Taft.....	Philander C. Knox.....1909	Jacob M. Dickinson.....1909		Josephus Daniels.....1913	J. C. McReynolds.....1913	Albert S. Burleson.....1913
Taft.....		Henry L. Stimson.....1911	William G. McAdoo.....1913		Thomas W. Gregory.....1914	
Wilson.....	William J. Bryan.....1913	Lindley K. Garrison.....1913	Carter Glass.....1919	Edwin Denby.....1921	A. M. Palmer.....1919	Will H. Hays.....1921
Wilson.....	Robert Lansing.....1915	Newton D. Baker.....1916	David F. Houston.....1920		H. M. Daugherty.....1921	Hubert Work.....1922
Wilson.....	Bainbridge Colby.....1920		Andrew W. Mellon.....1921	Edwin Denby.....1921		Harry S. New.....1923
Harding.....	Charles E. Hughes.....1921	John W. Weeks.....1921				Harry S. New.....1923
Harding.....			Andrew W. Mellon.....1923	Edwin Denby.....1923	H. M. Daugherty.....1923	Walter F. Brown.....1929
Harding.....	Charles E. Hughes.....1923	John W. Weeks.....1923		Curtis D. Wilbur.....1924	Harlan F. Stone.....1924	
Coolidge.....	Frank B. Kellogg.....1925	Dwight F. Davis.....1925		Charles F. Adams.....1929	John G. Sargent.....1925	
Coolidge.....			Andrew W. Mellon.....1929		William D. Mitchell.....1929	
Hoover.....	Henry L. Stimson.....1929	James W. Good.....1929	Ogden L. Mills.....1932			
Hoover.....		Patrick J. Hurley.....1929				

THE CABINET

BY ARTHUR M. SCHLESINGER, JR.

Adapted from *The Congressional Directory*.

STATE. The Secretary of State has the principal responsibility, under the President, for the determination of the policy of the government in relation to international problems. He is charged with the conduct of negotiations pertaining to the protection of American rights and interests throughout the world, and the promotion of beneficial intercourse between the United States and other countries. He also performs certain domestic duties, such as having custody of the seal of the United States and publishing the laws enacted by Congress.

TREASURY. The Secretary of the Treasury is charged by law with the management of the national finances. He superintends the collection of the revenue; grants warrants for money drawn from the Treasury in pursuance of appropriations made by law, and for the payment of moneys into the Treasury; directs the forms of keeping and rendering public accounts; prepares plans for the improvement of the revenue and for the support of the public credit; and submits a report annually to Congress on the condition of the public finances, and the results of activities under his supervision, which include, among others, the coinage and printing of money, and the administration of the Coast Guard, Narcotics and Secret Services.

WAR. The Secretary of War is charged by law with the supervision of all estimates of appropriations for the expenses of the Department, including the Military Establishment; of all purchases of Army supplies; of all expenditures for the support, transportation, and maintenance of the Army; and of civil expenditures placed by Congress under his direction.

JUSTICE. The Attorney General is the chief law officer of the Federal Government. He represents the United States in legal matters generally and gives advice and opinions when requested by the President or by the heads of the executive departments. He appears in the Supreme Court in cases of exceptional importance, exercises general superintendence over United States district attorneys and marshals in the various judicial districts, and provides special counsel for the United States when the character of the interests involved requires such action. The Federal Bureau of Investigation and the Bureau of Prisons are under his direction.

POST OFFICE. The Postmaster General is the executive head of the Postal Service. Subject to the approval of the President, he makes postal treaties with foreign governments.

NAVY. The Secretary of the Navy is responsible for the supervision of all naval matters.

INTERIOR. The Secretary of the Interior has the primary task of developing and conserving the natural resources of the United States and its territories for this and future generations. He is charged with the supervision of public business relating to such offices as the General Land Office, Bureau of Reclamation, Geological Survey, Office of Indian Affairs, National Park Service, Bureau of Mines, Division of Territories and Island Possessions, etc.

AGRICULTURE. The Secretary of Agriculture is charged with acquiring and diffusing among the people of the United States useful information on subjects connected with agriculture in the most general and comprehensive sense of the term. For that purpose he conducts a comprehensive research and educational program. He is also required to administer many other Federal laws which relate to marketing and distribution of agricultural products; the regulation of interstate commerce in food, fiber and related products; the protection and management of the national forests, farm credit, agricultural adjustment, conservation and land use, farm tenancy, and rural rehabilitation and electrification.

COMMERCE. The Secretary of Commerce directs such activities as population, agriculture and other censuses; collection, analysis and dissemination of commercial statistics; promotion of foreign and domestic commerce; coastal and geodetic surveys; establishment of commodity weights, measures, and standards; supervision of the issuance of patents and the registration of trade marks; the establishment and maintenance of aids to air navigation; development of inland waterway transportation.

LABOR. The Secretary of Labor is charged with the duty of fostering, promoting and developing the welfare of the wage earners of the United States, improving their working conditions, and advancing their opportunities for profitable employment. He has the power to act as mediator and to appoint commissioners of conciliation in labor disputes whenever in his judgment the interests of industrial peace may require it to be done. He directs the collection and collation of statistics concerning conditions of labor; the promulgation and enforcement of certain maximum hour, minimum wage, child labor, safety and health stipulations in connection with Government supply contracts; the investigation of matters pertaining to children.

U. S. CABINET PERSONNEL

Department of State

Secretary of State—James Francis Byrnes
Undersecretary—Dean Acheson
Counselor of the Department—Benjamin V. Cohen
Assistant Secretary of State (for Economic Affairs)—William L. Clayton
Assistant Secretary of State (for European, Far Eastern, Near Eastern and African Affairs)—Vacant
Assistant Secretary of State (for Administration)—Donald S. Russell
Assistant Secretary of State (for Public and Cultural Relations)—William Benton
Assistant Secretary of State (for American Republic Affairs)—Spruille Braden

Department of the Treasury

Secretary of the Treasury—John W. Snyder
Undersecretary—Daniel W. Bell
Assistant Secretary in Charge of Monetary Research and Foreign Funds—Harry D. White

Department of War

Secretary of War—Robert P. Patterson
Undersecretary—Kenneth C. Royall
Assistant Secretary of War—Howard C. Petersen

Department of Justice

Attorney General—Tom C. Clark
Solicitor General—J. Howard McGrath
Assistant to the Attorney General—James P. McGranery
Assistant Solicitor General—Harold Judson

Post Office Department

Postmaster General—Robert E. Hannegan
Executive Assistant to the Postmaster General—Sidney Salomon, Jr.

Department of the Navy

Secretary of the Navy—James V. Forrestal
Assistant Secretary—H. Struve Hensel
Assistant Secretary for Air—John L. Sullivan

Department of the Interior

Secretary of the Interior—Julius A. Krug
Undersecretary—Abe Fortas
Assistant Secretaries—Michael W. Straus; Oscar L. Chapman

Department of Agriculture

Secretary of Agriculture—Clinton P. Anderson
Undersecretary—J. B. Hutson
Assistant Secretary—Charles F. Brannan

Department of Commerce

Secretary of Commerce—William Averell Harriman
Undersecretary—Alfred Schindler
Assistant Secretary—William A. M. Burden

Department of Labor

Secretary of Labor—Lewis B. Schwellenbach
Undersecretary—Keen Johnson
Assistant Secretary—Daniel W. Tracy
Second Assistant Secretary—Edward C. Moran, Jr.

Minority Presidents

Source: Congressional Directory.

Nine presidents of the United States have been elected with a popular vote totaling less than fifty percent of the total vote cast. In only two cases, however, has the candidate receiving the largest popular vote failed to garner the majority in the Electoral College—Samuel J. Tilden in 1876 and Grover Cleveland in 1888. The "minority" presidents follow:

Year	President	Electoral	Popular vote
		Pct.	Pct.
1856	James A. Buchanan (D).....	58.7	45.3
1860	Abraham Lincoln (R).....	59.4	39.9
1876	Rutherford B. Hayes (R).....	50.1	47.9
1880	James A. Garfield (R).....	57.9	48.3
1884	Grover Cleveland (D).....	54.6	48.8
1888	Benjamin Harrison (R).....	58.1	47.8
1892	Grover Cleveland (D).....	62.4	46.0
1912	Woodrow Wilson (D).....	81.9	41.8
1916	Woodrow Wilson (D).....	52.1	46.0

The Presidential Succession

In case of the removal, death, resignation or inability of the president, the vice president succeeds. He is followed by the Secretaries of State, Treasury, War, Justice, Post Office, Navy and Interior, providing that they are constitutionally eligible.

Oath of Supreme Court Justice

"I do solemnly swear that I will administer justice without respect to persons, and do equal right to the poor and to the rich; and that I will faithfully discharge all the duties incumbent on me as Judge, according to the best of my abilities and understanding, agreeably to the Constitution and the laws of the United States."

May 22, 1621

Governor Edward Winslow of the Plymouth Colony married Susanna White, widow of William White, who died on February 21, 1621. This was the first recorded marriage in the New England Colonies.—F. P. A.

JUSTICES OF THE UNITED STATES SUPREME COURT

Name	State	Term	Years	Born	Died	Name	State	Term	Years	Born	Died
*John Jay	N. Y.	1789-1795	6	1745	1829	John M. Harlan	Ky.	1877-1911	34	1833	1911
John Rutledge	S. C.	1789-1791	2	1739	1800	William B. Woods	Ga.	1880-1887	7	1824	1887
William Cushing	Mass.	1789-1810	21	1733	1810	Stanley Matthews	Ohio	1881-1889	8	1824	1889
James Wilson	Pa.	1789-1799	9	1742	1798	Horace Gray	Mass.	1881-1902	21	1828	1902
John Blair	Va.	1789-1796	7	1732	1800	Samuel Blatchford	N. Y.	1882-1893	11	1820	1893
Robert H. Harrison	Md.	1789-1790	1	1745	1790	Lucius Q. Lamar	Miss.	1888-1893	5	1825	1893
James Iredell	N. C.	1790-1799	9	1751	1799	*Melville W. Fuller	Ill.	1888-1910	22	1833	1910
Thomas Johnson	Md.	1791-1793	2	1732	1819	David J. Brewer	Kan.	1889-1910	21	1837	1910
William Paterson	N. J.	1793-1806	13	1245	1806	Henry B. Brown	Mich.	1890-1906	16	1836	1913
*John Rutledge	S. C.	1795-1795	..	1739	1800	George Shiras, Jr.	Pa.	1892-1903	11	1832	1924
Samuel Chase	Md.	1796-1811	15	1741	1811	Howell E. Jackson	Tenn.	1893-1895	2	1832	1895
*Deliver Ellsworth	Conn.	1796-1800	4	1745	1807	*Edward D. White	La.	1894-1921	27	1845	1921
Bushrod Washington	Va.	1798-1829	31	1762	1829	Rufus W. Peckham	N. Y.	1895-1909	14	1837	1909
Alfred Moore	N. C.	1799-1804	5	1755	1810	Joseph McKenna	Cal.	1898-1925	27	1843	1926
*John Marshall	Va.	1801-1835	34	1755	1835	Oliver W. Holmes	Mass.	1902-1932	30	1841	1935
William Johnson	S. C.	1804-1834	30	1771	1834	William R. Day	Ohio	1903-1922	19	1849	1923
Brock Livingston	N. Y.	1806-1823	17	1757	1823	William H. Moody	Mass.	1906-1910	4	1853	1917
Thomas Todd	Ky.	1807-1826	19	1765	1826	Horace H. Lurton	Tenn.	1909-1914	5	1844	1914
Joseph Story	Mass.	1811-1845	34	1779	1845	Charles E. Hughes	N. Y.	1910-1916	6	1862	
Gabriel Duval	Md.	1811-1835	25	1752	1844	Willis Van Devanter	Wyo.	1910-1937	26	1859	1941
Smith Thompson	N. Y.	1823-1843	20	1767	1843	Joseph R. Lamar	Ga.	1910-1916	6	1857	1916
Robert Trimble	Ky.	1826-1828	2	1777	1828	Mahlon Pitney	N. J.	1912-1923	11	1858	1924
John McLean	Ohio	1829-1861	32	1785	1861	Jas. C. McReynolds	Tenn.	1914-1941	26	1862	
Henry Baldwin	Pa.	1830-1844	14	1779	1844	Louis D. Brandeis	Mass.	1916-1939	23	1856	1941
James M. Wayne	Ga.	1835-1867	32	1790	1867	John H. Clarke	Ohio	1916-1922	6	1857	
*Roger B. Taney	Md.	1836-1864	28	1777	1864	*William H. Taft	Conn.	1921-1930	9	1857	1930
Philip P. Barbour	Va.	1836-1841	5	1783	1841	George Sutherland	Utah	1922-1938	16	1862	1942
John Catron	Tenn.	1837-1865	28	1786	1865	Pierce Butler	Minn.	1922-1939	27	1866	1939
John McKinley	Ala.	1837-1852	15	1780	1852	Edward T. Sanford	Tenn.	1923-1930	7	1865	1930
Peter V. Daniel	Va.	1841-1860	19	1785	1860	Harlan F. Stone	N. Y.	1925-1941	16	1872	1946
Samuel Nelson	N. Y.	1845-1872	27	1792	1873	*Charles E. Hughes	N. Y.	1930-1941	11	1862	
Levi Woodbury	N. H.	1845-1851	6	1789	1851	Owen J. Roberts	Penn.	1930-1945	15	1875	
Robert C. Grier	Pa.	1846-1870	23	1794	1870	Benjamin N. Cardozo	N. Y.	1932-1938	6	1870	1938
Benjamin R. Curtis	Mass.	1851-1857	6	1809	1874	Hugo L. Black	Ala.	1937		1886	
John A. Campbell	Ala.	1853-1861	8	1811	1889	Stanley F. Reed	Ky.	1938		1884	
Nathan Clifford	Me.	1858-1881	23	1803	1881	Felix Frankfurter	Mass.	1939		1882	
Noah H. Swayne	Ohio	1862-1881	20	1804	1884	William O. Douglas	Conn.	1939		1898	
Samuel F. Miller	Iowa	1862-1890	28	1816	1890	Frank Murphy	Mich.	1940		1893	
David Davis	Ill.	1862-1877	15	1815	1886	*Harlan F. Stone	N. Y.	1941-1946	5	1872	1946
Stephen J. Field	Cal.	1863-1897	34	1816	1899	James F. Byrnes	S. C.	1941-1942	1	1879	
*Salmon P. Chase	Ohio	1864-1873	9	1808	1873	Robert H. Jackson	N. Y.	1941		1892	
William Strong	Pa.	1870-1880	10	1808	1895	Wiley B. Rutledge	Iowa	1943		1894	
Joseph P. Bradley	N. J.	1870-1892	22	1813	1892	Harold H. Burton	Ohio	1945		1888	
Ward Hunt	N. Y.	1872-1882	10	1811	1886	*Fred M. Vinson	Ky.	1946		1890	
*Morrison R. Waite	Ohio	1874-1888	14	1816	1888						

* Chief Justices.

Secession of States During the Civil War

Confederate States*	Act of secession		Constitution ratified	Provisional government appointed	Readmission date	New constitution ratified
	Legislatures adopted	Vote Yes No				
Alabama	Jan. 11, 1861	61 39	Mar. 13, 1861	June 21, 1865	June 25, 1868	Nov. 16, 1875
Arkansas	May 6, 1861	69 1	.....	None	June 22, 1868	Mar. 13, 1868
Florida	Jan. 10, 1861	62 7	.....	July 13, 1865	June 25, 1868	May 4, 1868
Georgia	Jan. 19, 1861	208 89	Mar. 16, 1861	June 17, 1865	July 15, 1870	Apr. 20, 1868
Louisiana	Jan. 26, 1861	113 17	Mar. 21, 1861	None	June 25, 1868	Aug. 17, 1867
Mississippi	Jan. 9, 1861	84 15	Mar. 30, 1861	June 13, 1865	Feb. 23, 1870	Dec. 1, 1868
North Carolina	May 21, 1861	Unanimous	May 21, 1861	May 29, 1865	June 25, 1868	July 2, 1868
South Carolina	Dec. 20, 1860	Unanimous	Apr. 3, 1861	June 30, 1865	June 25, 1868	Apr. 14, 1868
Tennessee	June 8, 1861	.....	.....	None	July 24, 1866	Feb. 22, 1865
Texas	Feb. 1, 1861	166 7	Mar. 23, 1861	June 17, 1865	Mar. 30, 1870	June 25, 1866
Virginia	Apr. 17, 1861	88 55	Apr. 25, 1861	None	Jan. 26, 1870	July 6, 1869

*Missouri, Kentucky, Maryland and Delaware did not pass an act of secession and declared themselves neutral.

Diplomatic Personnel to and from the United States

Source: U. S. Department of State.

Country	United States envoy to	Rank	Envoy from	Rank
Afghanistan.....	Ely E. Palmer.....	Minister.....	Abdol Hosayn Aziz.....	Envoy extraordinary and minister plenipotentiary
Albania.....	Joseph E. Jacobs.....	Foreign service officer.....		
Argentina.....	John M. Cabot.....	Charge d'affaires.....	Don Luis S. Luti.....	Minister counselor, charge d'affaires
Australia.....	Robert L. Butler.....	Ambassador.....	Sir Frederic Eggleston...	Envoy extraordinary and minister plenipotentiary
Belgium.....	Alan Kirk.....	Ambassador.....	Baron Silvercruys.....	Ambassador extraordinary and plenipotentiary
Bolivia.....	Walter Thurston.....	Ambassador.....	Don Victor Andrade.....	Ambassador extraordinary and plenipotentiary
Brazil.....	Paul C. Daniels.....	Charge d'affaires.....	Carlos Martins.....	Ambassador extraordinary and plenipotentiary
Bulgaria.....	Maynard B. Barnes.....	Foreign service officer.....		
Canada.....	Ray Atherton.....	Ambassador.....	Lester B. Pearson.....	Ambassador extraordinary and plenipotentiary
Chile.....	Claude G. Bowers.....	Ambassador.....	Felix Nieto Del Rio.....	Ambassador extraordinary and plenipotentiary
China.....	Dr. John Leighton Stuart.....	Ambassador.....		
	General George Marshall.....	Special representative of the president.....	Dr. Wei Tao-ming.....	Ambassador extraordinary and plenipotentiary
Colombia.....	John C. Wiley.....	Ambassador.....	Don Carlos Sanz de Santamaria.....	Ambassador extraordinary and plenipotentiary
Costa Rica.....	Hallett Johnson.....	Ambassador.....	Don Francisco de P. Gutierrez.....	Ambassador extraordinary and plenipotentiary
Cuba.....	R. Henry Norweb.....	Ambassador.....	Dr. Guillermo Belt.....	Ambassador extraordinary and plenipotentiary
Czechoslovakia.....	Laurence A. Steinhardt.....	Ambassador.....	Vladimir Hurban.....	Ambassador extraordinary and plenipotentiary
Denmark.....	Josiah Marvel.....	Minister.....	Henrik de Kauffmann.....	Envoy extraordinary and minister plenipotentiary
Dominican Republic..	Joseph F. McGurk.....	Ambassador.....	Don Emilio Garcia Godoy.....	Ambassador extraordinary and plenipotentiary
Ecuador.....	Robert M. Scotten.....	Ambassador.....	Galo Plaza.....	Ambassador extraordinary and plenipotentiary
Egypt.....	S. Pinkney Tuck.....	Minister.....	Mahmoud Hassan.....	Envoy extraordinary and minister plenipotentiary
El Salvador.....	John F. Simmons.....	Ambassador.....	Dr. Don Hector David Castro.....	Ambassador extraordinary and plenipotentiary
Estonia.....			Johannes Kaiv.....	Acting consul general
Ethiopia.....	Felix Cole.....	Minister.....	Blatta Ephrem Tewelde Medhen.....	Envoy extraordinary and minister plenipotentiary
Finland.....	Maxwell M. Hamilton.....	Minister.....	Dr. K. T. Jutila.....	Envoy extraordinary and minister plenipotentiary
France.....	Jefferson Caffery.....	Ambassador.....	Henri Bonnet.....	Ambassador extraordinary and plenipotentiary
Great Britain.....		Ambassador.....	Baron Inverchapel.....	Ambassador extraordinary and plenipotentiary
Greece.....	Lincoln MacVeagh.....	Ambassador.....	Cimon P. Diamantopoulos.....	Ambassador extraordinary and plenipotentiary
Guatemala.....	Edwin J. Kyle.....	Ambassador.....	Jorge Garcia Granados...	Ambassador extraordinary and plenipotentiary
Haiti.....	Orme Wilson.....	Ambassador.....	Daniel Theard.....	Second secretary
Honduras.....	John D. Erwin.....	Ambassador.....	Dr. Don Julian R. Caceres.....	Ambassador extraordinary and plenipotentiary
Hungary.....	H. F. Arthur Schoenfeld.....	Foreign service officer.....	Aladar Szegedy-Maszak.....	Envoy extraordinary and minister plenipotentiary
Iceland.....	Louis G. Dreyfus, Jr.....	Minister.....	Thor Thors.....	Envoy extraordinary and minister plenipotentiary
Iran.....	Wallace Murray.....	Ambassador.....	Hussein Ala.....	Ambassador extraordinary and plenipotentiary
Iraq.....	George Wadsworth.....	Charge d'affaires.....	Ali Jawdat.....	Envoy extraordinary and minister plenipotentiary

Country	United States envoy to	Rank	Envoy from	Rank
Ireland.....	David Gray.....	Minister.....	Robert Brennan.....	Envoy extraordinary and minister plenipotentiary
Italy.....	James Clement Dunn...	Ambassador.....	Alberto Tarchiani.....	Ambassador extraordinary and plenipotentiary
Latvia.....			Dr. Alfred Bilmanis.....	Envoy extraordinary and minister plenipotentiary
Lebanon.....	George Wadsworth.....	Minister.....	Dr. Charles Malik.....	Envoy extraordinary and minister plenipotentiary
Liberia.....	Raphael Lanier.....	Minister.....		
Lithuania.....			Povilas Zadeikis.....	Envoy extraordinary and minister plenipotentiary
Luxembourg.....	Alan Kirk.....	Minister.....	Hugues Le Gallais.....	Envoy extraordinary and minister plenipotentiary
Mexico.....	George S. Messersmith..	Ambassador.....	Dr. Don Antonio Espinosa de los Monteros	Ambassador extraordinary and plenipotentiary
Morocco.....	Paul H. Alling.....	Diplomatic agent consul general		
Netherlands.....	Stanley K. Hornbeck....	Ambassador.....	Dr. Alexander Loudon...	Ambassador extraordinary and plenipotentiary
New Zealand.....	Avra Warren.....	Minister.....	Sir Carl Berendsen, K.C.M.G.	Envoy extraordinary and minister plenipotentiary
Nicaragua.....	Fletcher Warren.....	Ambassador.....	Dr. Don Guillermo Sevilla Sacasa	Ambassador extraordinary and plenipotentiary
Norway.....	Lithgow Osborne.....	Ambassador.....	Wilhelm Munthe de Morgenstierne	Ambassador extraordinary and plenipotentiary
Palestine & Transjordan	Lowell C. Pinkerton.....	Consul general		
Panama.....	Frank T. Hines.....	Ambassador.....	Dr. Don J. J. Vallarino...	Ambassador extraordinary and plenipotentiary
Paraguay.....	Willard L. Beaulac.....	Ambassador.....	Dr. Don Celso R. Velazquez	Ambassador extraordinary and plenipotentiary
Peru.....	William D. Pawley.....	Ambassador.....	Dr. Humberto Fernandez-Davila	Minister plenipotentiary
Poland.....	Arthur Bliss Lane.....	Ambassador.....	Oskar Lange.....	Ambassador extraordinary and plenipotentiary
Portugal.....	Herman B. Baruch.....	Ambassador.....	Dr. Joao Antonio de Bianchi	Ambassador extraordinary and plenipotentiary
Rumania.....	Burton Y. Berry.....	Foreign service officer	Mikhail Ralea.....	Envoy extraordinary and minister plenipotentiary
Saudi Arabia.....	William A. Eddy.....	Minister.....	Asad Al Faquih.....	Envoy extraordinary and minister plenipotentiary
Siam.....			Mom Rajawongse Seni Pramoj	Envoy extraordinary and minister plenipotentiary
Spain.....	Philip W. Bonsal.....	Charge d'affaires.	Don Juan Francisco de Cardenas	Ambassador extraordinary and plenipotentiary
Sweden.....	Herschel V. Johnson.....	Minister.....	Herman Eriksson.....	Envoy extraordinary and minister plenipotentiary
Switzerland.....	Leland Harrison.....	Minister.....	Charles Bruggmann.....	Envoy extraordinary and minister plenipotentiary
Tunisia.....	George Wadsworth.....	Minister.....	Dr. Nazem al-Koudsi...	Envoy extraordinary and minister plenipotentiary
Turkey.....	Edwin C. Wilson.....	Ambassador.....	Huseyin Ragip Baydur...	Ambassador extraordinary and plenipotentiary
Union of South Africa.	Thomas Holcomb.....	Minister.....	H. T. Andrews.....	Envoy extraordinary and minister plenipotentiary
Union of Soviet Socialist Republics	Bedell Smith.....	Ambassador.....	Nikolai V. Novikov.....	Ambassador extraordinary and plenipotentiary
Uruguay.....	William Dawson.....	Ambassador.....	Dr. Juan Carlos Blanco..	Ambassador extraordinary and plenipotentiary
Venezuela.....	Myron C. Taylor.....	Special envoy		
Venezuela.....	Frank P. Corrigan.....	Ambassador.....	Dr. Don Diogenes Escalante	Ambassador extraordinary and plenipotentiary
Yugoslavia.....	Richard Patterson, Jr...	Ambassador.....	Stanoje Simic.....	Ambassador extraordinary and plenipotentiary

The Declaration of Independence was nearly captured by the British in 1812. This distinguished document narrowly escaped destruction many times and didn't find a permanent resting place until 1921 when it was put on display in the Library of Congress.—*Ency. Brit.*

Four Governors of New York became Presidents: Martin Van Buren, Grover Cleveland, Theodore Roosevelt, and Franklin D. Roosevelt. Three Governors of New York became Vice Presidents: George Clinton, Daniel D. Tompkins, and Theodore Roosevelt.

Congressional Committees

Source: Public Law 601—79th Congress.

Under the Legislative Reorganization Act of 1946, the number of standing committees of the Senate was reduced from thirty-three to fifteen and committees of the House of Representatives from forty-five to nineteen. This would be effective on January 20, 1947, opening day of the 80th Congress.

Senate Committees	Members	House Committees	Members
Agriculture and Forestry	13	Agriculture	27
Appropriations	21	Appropriations	43
Armed Services	13	Armed Services	33
Banking and Currency	13	Banking and Currency	27
Civil Service	13	Civil Service and Post Office	25
District of Columbia	13	District of Columbia	25
Expenditures, Executive Depts.	13	Education and Labor	25
Finance	13	Expenditures, Executive Depts.	25
Foreign Relations	13	Foreign Affairs	25
Interstate and Foreign Commerce	13	House Administration	25
Judiciary	13	Interstate and Foreign Commerce	27
Labor and Public Welfare	13	Judiciary	27
Public Lands	13	Merchant Marine and Fisheries	25
Public Works	13	Public Lands	25
Rules and Administration	13	Public Works	27
		Rules	12
		Un-American Activities	9
		Veterans' Affairs	27
		Ways and Means	25

Federal Impeachments

Source: Congressional Directory.

The Senate has sat as a court of impeachment in the cases of the following accused public officials, with the result stated, for the periods named:

WILLIAM BLOUNT, Senator from Tennessee; charges dismissed for want of jurisdiction; December 17, 1798, to January 14, 1799.

JOHN PICKERING, Judge of the United States District Court for the district of New Hampshire; removed from office; March 3, 1803, to March 12, 1804.

SAMUEL CHASE, Associate Justice of the Supreme Court of the United States; acquitted; November 30, 1804, to March 1, 1805.

JAMES H. PECK, Judge of the United States District Court for the district of Missouri; acquitted; April 26, 1830, to January 31, 1831.

WEST H. HUMPHREYS, Judge of the United States District Court for the middle, eastern, and western districts of Tennessee; removed from office; May 7, 1862, to June 26, 1862.

ANDREW JOHNSON, President of the United States; acquitted; February 25, 1868, to May 26, 1868.

WILLIAM W. BELKNAP, Secretary of War; acquitted; March 3, 1876, to August 1, 1876.

CHARLES SWAYNE, Judge of the United States District Court for the northern district of Florida; acquitted; December 14, 1904, to February 27, 1905.

ROBERT W. ARCHBALD, Associate Justice, United States Commerce Court; removed from office; July 13, 1912, to January 13, 1913.

GEORGE W. ENGLISH, Judge of the United States District Court for the eastern district of Illinois; resigned office November 4, 1926; court of impeachment adjourned to December 13, 1926, when, on request of House managers, impeachment proceedings were dismissed.

HAROLD LOUDERBACK, Judge of the United States District Court for the northern district of California; acquitted; May 15, 1933, to May 24, 1933.

HALSTED L. RITTER, Judge of the United States District Court for the southern district of Florida; removed from office; April 6, 1936, to April 17, 1936.

Counting the Counties

There are more counties named Washington than any other—29 states have Washington Counties. Next are Jefferson, 26; Lincoln, 24; Franklin, 23; Jackson, 22; Adams, 12.—*F. P. A.*

Agriculture

The farmer in the dell,
The time he has is swell;
He listens to the radio sing
"The Farmer in the Dell."
—*F. P. A.*

Wives of the Presidents of the United States

President	Wife's name	Year and place of birth	Married	Died	Sons	Daughters
Washington	Martha (Dandridge) Custis	1732, Va.	1759	1802	..	..
John Adams	Abigail Smith	1744, Mass.	1764	1818	3	2
Jefferson	Martha (Wayles) Skelton	1748, Va.	1772	1782	1	5
Madison	Dorothy ("Dolly" Payne) Todd	1772, N. Car.	1794	1849	..	..
Monroe	Eliza Kortright	1768, N. Y.	1786	1830	..	2
John Quincy Adams	Louisa Catherine Johnson	1775, England	1797	1852	3	1
Jackson	Rachel (Donelson) Robards	1767, Va.	1791	1828	..	..
Van Buren	Hannah Hoes	1783, N. Y.	1807	1819	4	..
William H. Harrison	Anna Symmes	1775, N. J.	1795	1864	6	4
Tyler	Letitia Christian	1790, Va.	1813	1842	3	4
	Julia Gardiner	1820, N. Y.	1844	1889	5	2
Folk	Sarah Childress	1803, Tenn.	1824	1891	..	..
Taylor	Margaret Smith	1788, Md.	1810	1852	1	5
Fillmore	Abigail Powers	1798, N. Y.	1826	1853	1	1
	Caroline (Carmichael) McIntosh	1813, N. J.	1858	1881	..	..
Pierce	Jane Means Appleton	1806, N. H.	1834	1863	3	..
Buchanan	(Unmarried)	....	....	....	..	..
Lincoln	Mary Todd	1818, Ky.	1842	1882	4	..
Johnson	Eliza McCardle	1810, Tenn.	1827	1876	3	2
Grant	Julia Dent	1826, Mo.	1848	1902	3	1
Hayes	Lucy Ware Webb	1831, Ohio	1852	1889	7	1
Garfield	Lucretia Rudolph	1832, Ohio	1858	1918	4	1
Arthur	Ellen Lewis Herndon	1837, Va.	1859	1880	2	1
Cleveland	Frances Folsom	1864, N. Y.	1886	....	2	3
Benjamin Harrison	Caroline Lavinia Scott	1832, Ohio	1853	1892	1	1
	Mary Scott (Lord) Dimmick	1858, Pa.	1896	....	..	1
McKinley	Ida Saxton	1847, Ohio	1871	1907	..	2
Theodore Roosevelt	Alice Hathaway Lee	1861, Mass.	1880	1884	..	1
	Edith Kermit Carow	1861, N. Y.	1886	....	4	1
Taft	Helen Herron	1861, Ohio	1886	1943	2	1
Wilson	Ellen Louise Axson	1860, Ga.	1885	1914	..	3
	Edith (Bolling) Galt	1872, Va.	1915	....	..	..
Harding	Florence (Kling) DeWolfe	1860, Ohio	1891	1924	..	..
Coolidge	Grace Anna Goodhue	1879, Vt.	1905	....	2	..
Hover	Lou Henry	1875, Iowa	1899	1944	2	..
Franklin D. Roosevelt	Anna Eleanor Roosevelt	1884, N. Y.	1905	....	4	1
Truman	Bess Wallace	1885, Mo.	1919	....	..	1

Territorial Expansion of Continental United States

Source: U. S. Bureau of the Census.

Accession	Date	Gross area, square miles	Accession	Date	Gross area, square miles
Territory in 1790	....	888,811	Alaska Territory	1867	586,400
Adams Purchase	1803	827,192	Hawaii Territory	1898	6,454
Florida	1819	58,560	Philippine Islands	1899	115,600
Treaty with Spain	1819	13,443	Puerto Rico	1899	3,435
Texas	1845	390,144	Guam	1899	206
Oregon	1846	285,580	American Samoa	1900	76
Mexican Cession	1848	529,017	Panama Canal Zone	1904	553
Gadsden Purchase	1853	29,640	Virgin Islands of U. S.	1917	133
Continental United States	....	3,022,387	Territories and possessions	....	712,857
			Aggregate (1940)	....	3,735,244 square miles

HISTORY OF POLITICAL PARTIES

BY ARTHUR M. SCHLESINGER, JR.

The Founding Fathers did not anticipate the rise of political parties in the modern form; or, at least, the original sections in the Constitution governing the election of the President provided for electors acting as independent agents rather than for party voting. But the controversy over the adoption of the Constitution itself produced a division between the Federalists, who favored the formation of a strong central government, and the Anti-Federalists, who feared the possibly tyrannical effects of centralization. This division corresponded roughly to that between the financial, commercial and industrial interests, on the one hand, and the farming and planting interests, on the other; and, as James Madison pointed out in the tenth *Federalist* paper (1788), it was natural for such conflicting interests to serve as the foundation for political rivalries.

1

The parties which arose after the Constitution were derived in part from the division over the Constitution, though with important modifications. Madison and Thomas Jefferson, for example, favored the Constitution but assumed thereafter the leadership of the Anti-Federalist or Republican or, as it became later known, Democratic party.

The first great issues emerged over Alexander Hamilton's financial program. The policies of the Secretary of the Treasury were designed to give the new nation solid economic foundations and to interest the business classes in its continuing prosperity; but Hamilton's concrete program of funding the national debt and establishing the Bank of the United States benefited the business community at the expense, as the Jeffersonians believed, of the agricultural classes. Differences over the Federalist domestic program were aggravated by differences over foreign policy, where the Federalists, especially in their sponsorship of Jay's Treaty (1794), favored a pro-British policy while the Republicans sympathized ardently with the revolutionary government in France.

Washington himself strongly disapproved of the rise of party spirit, sought to harness it by keeping both Jefferson and Hamilton in his cabinet, and warned solemnly of its baneful consequences for the republic in his Farewell Address. Nevertheless, the very character of the executive office required him, in spite of himself, to identify himself with a party program. He chose the Federalist; and the resignation of Jefferson as Secretary of State in 1793 marked the first failure of non-party cabinet government, though the ideal was to linger as late as the presidency of John Quincy Adams.

After dominating the national government for its first twelve years, the Federalists were defeated in the election of 1800 and never recovered power. That election also revealed certain anomalies in the electoral process. The electors, voting strictly according to party choice and thus contrary to the anticipations of the Founding Fathers, cast the same number of votes for Jefferson and for Aaron Burr, the presidential and vice-presidential candidates of the Republican party; and the decision accordingly was thrown to the House of Representatives. To avoid such future situations, the Twelfth Amendment (1804) provided for separate ballots for President and Vice-President and thereby established the party system more firmly.

The Democratic-Republican party now entered a period of dominance. By the election of 1820 the Federalist party did not even bother to present a candidate against James Monroe; and it thereafter disappeared from the national scene. An important reason for this disappearance was the fact that the business classes no longer needed it; the Democratic-Republicans, particularly under Madison and Monroe, had retreated from the traditional Jeffersonian positions and were now enacting most of the domestic program of Hamilton.

2

All the rivals for the presidency in 1824—John Quincy Adams, Andrew Jackson, William H. Crawford, Henry Clay, John C. Calhoun—were nominally Democratic-Republicans. The bitter divisions during Adams's administration were based mostly on personal acrimony rather than on genuine issues. Jackson, however, after his election in 1828, began to advocate national policies, especially with respect to the United States Bank, which revived the distinction between the interests of the farming and laboring classes and the interests of the business community.

The consequence was the strengthening of the party system; indeed, modern American politics may be said to date from the Jackson administration. The right wing of the Democratic-Republican party, known first as the National Republicans and after 1835 as the Whig party, opposed Jackson with increasing vehemence in the name of the industrial and commercial classes. Its leaders were Henry Clay and Daniel Webster, and its function in American political life corresponded to that of the Federalists a quarter of a century earlier. The left wing of the Democratic-Republican party, soon to be known simply as the Democratic party, sought under the leadership of Jackson and Van Buren to vindicate and extend the Jacksonian policies.

Jackson transformed the conception of the presidency by employing more vigorously than any predecessor the resources of political leadership inherent in the office—both to organize a political party (the introduction of the “spoils system”) and to carry out a national policy. His resolution of controversies within the cabinet made clear (except during the brief life of the Tenure of Office Act, passed in 1867) that the job of the secretaries was to execute the policy of the President. The independence of the executive from Congress was further confirmed by the disappearance of the Congressional caucus, which from 1796 to 1824 had been the customary method for nominating presidential candidates. It was replaced first by nominations from state legislatures and then by party nominating conventions. The Anti-Masonic party held the first national convention in 1831, and in 1835 the Democrats established the practice by nominating Van Buren in a convention at Baltimore. The first “dark horse” candidate to sweep a convention was James K. Polk at the Democratic convention in 1844.

The Democrats in general favored a hard money financial policy, greater restrictions on private banking, the establishment of an independent treasury, the reduction of the tariff and limitations on nationally-financed internal improvements. After Van Buren's administration (1837–40), however, these traditional issues between the Democrats and Whigs began to dwindle before the issue of slavery. The older parties at first sought to ignore the slavery question. The result was the formation of the Liberty party in 1840 and growing restlessness within the two major parties. In 1848 anti-slavery Democrats joined with the Liberty party and some Conscience (anti-slavery) Whigs to create the Free Soil party, which Van Buren ran for the presidency. The Republican party emerged out of this coalition in 1854 to replace the Whig party, which had failed conspicuously to respond to the needs of the times and virtually disappeared after its bad beating in 1852. Progressively losing its Jacksonian character, the Democratic party by the late fifties was increasingly the party of the slaveholders.

3

The Civil War left the Republican and Democratic parties as the two great political parties. Under the impetus of its war record and of Democratic association with the Union, the Republican party stayed in power until the election of Grover Cleveland in 1884, taking over the role formerly occupied by the Federalists and the Whigs representing the interests of the business community in the national government.

Differences between the two parties did not assume a very fundamental form until

the rise of Grover Cleveland brought new Democratic emphasis on the low tariff and on civil service reform. In the meantime, the Populist party arose in the South and West in the late eighties as the vehicle for more radical aspirations. With the nomination of William Jennings Bryan by the Democrats in 1896, the Populists saw a major party adopt their issues, especially the demand for “free silver.” Following Bryan's defeat by William McKinley in the bitterly contested campaign of 1896, the separate Populist organization soon lapsed and was absorbed into the Democratic party.

The tensions of industrial society released after the turn of the century a swelling pressure for social change which found expression in both major parties. Under Theodore Roosevelt the Republicans made their last sustained attempt to act as a party of social reform. When the Republicans refused to renominate Roosevelt in 1912, he bolted to set up his own Progressive party; and the split elected Woodrow Wilson, who succeeded in recapturing most liberals for the Democratic party. Under Harding, Coolidge and Hoover, the Republican party proceeded to base itself more squarely than ever on the desires of the business community; and under Wilson and Franklin D. Roosevelt the Democrats resumed the role of militant opposition to business control laid down for their party by Jefferson and Jackson. While the current top Democratic leadership is less militant in this respect than the New Deal which preceded it, the 1946 primaries still indicate that liberals are more likely to be nominated by Democrats than by Republicans.

The American party system is basically a two party system, with one party customarily representing business interests and the other opposed to business domination. There have been, however, throughout American history a large number of “third parties” organized around other issues. The Anti-Masonic party (1830–38) was established to fight the supposed power of the Masonic societies; the Know-Nothing or American party (1849–56) opposed foreigners; the Prohibitionist party (1869–) denounced the sale of liquor. Where third parties have agitated urgent issues, as in the case of the Liberty and Free Soil parties, or the Populist party, they have seen the major parties take up these issues. The Republican party is the only instance, however, of a third party which became itself one of the two major parties.

At present, minor parties play a negligible role in American political life. The Progressive and Farmer-Labor parties, which represented independent agrarian sentiment in Wisconsin and Minnesota, have in recent years been re-absorbed in the Republican party. In New York the

American Labor and Liberal parties exert influence, but not beyond the state borders. Third party voting has declined in recent years to a point where in many states minor parties have not been able to meet ballot requirements. The leading minor parties today are the Socialist, a

reformist left-wing party; the Socialist Labor, a more militant party but still within the American radical tradition; the Communist, a party which identifies the interests of the American working class with the interests of the Soviet Union; and the Prohibitionist.

Electoral Vote for President, 1904-1944

Compiled from official state records.

States	1904 Roosevelt, Rep. Parker, Dem.	1908 Taft, Rep. Bryan, Dem.	1912 Wilson, Dem. Taft, Rep. Roosevelt, Prog.	1916 Wilson, Dem. Hughes, Rep.	1920 Harding, Rep. Cox, Dem.	1924 Coolidge, Rep. Davis, Dem.	1928 Hoover, Rep. Smith, Dem.	1932 Roosevelt, Dem. Hoover, Rep.	1936 Roosevelt, Dem. Landon, Rep.	1940 Roosevelt, Dem. Willkie, Rep.	1944 Roosevelt, Dem. Dewey, Rep.
Alabama	11	11	12	12	12	12	12	11	11	11	11
Arizona			3	3	3	3	3	3	3	3	4
Arkansas	9	9	9	9	9	9	9	9	9	9	9
California	10	10	2	13	13	13	13	22	22	22	25
Colorado	5	5	6	6	6	6	6	6	6	6	6
Connecticut	7	7	7	7	7	7	7	8	8	8	8
Delaware	3	3	3	3	3	3	3	3	3	3	3
Florida	5	6	6	6	6	6	6	7	7	7	8
Georgia	13	13	14	14	14	14	14	12	12	12	12
Idaho	3	3	4	4	4	4	4	4	4	4	4
Illinois	27	27	29	29	29	29	29	29	29	29	28
Indiana	15	15	15	15	15	15	15	14	14	14	14
Iowa	13	13	13	13	13	13	13	11	11	11	11
Kansas	10	10	10	10	10	10	10	9	9	9	9
Kentucky	13	13	13	13	13	13	13	11	11	11	11
Louisiana	9	9	10	10	10	10	10	10	10	10	10
Maine	6	6	6	6	6	6	6	5	5	5	5
Maryland	7	2	8	8	8	8	8	8	8	8	8
Massachusetts	16	16	18	18	18	18	18	17	17	17	16
Michigan	14	14	15	15	15	15	15	19	19	19	19
Minnesota	11	11	12	12	12	12	12	11	11	11	11
Mississippi	10	10	10	10	10	10	10	9	9	9	9
Missouri	18	18	18	18	18	18	18	15	15	15	15
Montana	3	3	4	4	4	4	4	4	4	4	4
Nebraska	8	8	8	8	8	8	8	7	7	7	7
Nevada	3	3	3	3	3	3	3	3	3	3	3
New Hampshire	4	4	4	4	4	4	4	4	4	4	4
New Jersey	12	12	14	14	14	14	14	16	16	16	16
New Mexico			3	3	3	3	3	3	3	3	4
New York	39	39	45	45	45	45	45	47	47	47	47
North Carolina	12	12	12	12	12	12	12	13	13	13	14
North Dakota	4	4	5	5	5	5	5	4	4	4	4
Ohio	23	23	24	24	24	24	24	26	26	26	26
Oklahoma		7	10	10	10	10	10	11	11	11	10
Oregon	4	4	5	5	5	5	5	5	5	5	6
Pennsylvania	34	34	38	38	38	38	38	36	36	36	35
Rhode Island	4	4	5	5	5	5	5	4	4	4	4
South Carolina	9	9	9	9	9	9	9	8	8	8	8
South Dakota	4	4	5	5	5	5	5	4	4	4	4
Tennessee	12	12	12	12	12	12	12	11	11	11	12
Texas	18	18	20	20	20	20	20	23	23	23	23
Utah	3	3	4	4	4	4	4	4	4	4	4
Vermont	4	4	4	4	4	4	4	3	3	3	3
Virginia	12	12	12	12	12	12	12	11	11	11	11
Washington	5	5	7	7	7	7	7	8	8	8	8
West Virginia	7	7	8	8	8	8	8	8	8	8	8
Wisconsin	13	13	13	13	13	*	13	12	12	12	12
Wyoming	3	3	3	3	3	3	3	3	3	3	3
Total	336 140	321 162	435 8 88	277 254	404 127	382 136	444 87	472 59	523 8	449 82	432 9

*LaFollette, Prog., 13

Candidates for President and Vice President

Election Results

1789 to 1924

The Constitution does not provide for the popular election of either the president or vice-president. It merely states that they shall be chosen by electors who shall be chosen in a manner prescribed by the state legislatures. No set of popular vote returns is complete or entirely significant until 1872, because that was the first election in which all electors were chosen by popular vote. Moreover, by referring to the returns in 1876 and 1888, it can be seen that the candidate with the largest number of votes need not necessarily be elected.

1789 to 1800

Year	Presidential candidates	Party	Electoral vote	Year	Presidential candidates	Party	Electoral vote
1789 ^{1,2}	George Washington	No party	69	1796	Thomas Jefferson	Dem.-Rep.	68
	John Adams	No party	34		Thomas Pinckney	Fed.	59
	Scattering	No party	35		Aaron Burr	Dem.-Rep.	30
1792 ¹	George Washington	Fed.	132		Scattering		48
1792	John Adams	Fed.	77	1800 ^{1,3}	Thomas Jefferson	Dem.-Rep.	73
	George Clinton	Anti-Fed.	50		Aaron Burr	Dem.-Rep.	73
	Thomas Jefferson	Anti-Fed.	4		John Adams	Fed.	65
	Aaron Burr	Anti-Fed.	1		C. C. Pinckney	Fed.	64
1796 ¹	John Adams	Fed.	71		John Jay	Fed.	1

¹In all elections prior to 1804, the candidate with the greatest number of electoral votes was President and the next highest was Vice President. Hence Washington became President and Adams Vice President.

²The New York legislature chose no electors. North Carolina and Rhode Island had not yet ratified the Constitution.

³Since Jefferson and Burr were tied, the House of Representatives chose the President. In a vote by states, 10 votes were cast for Jefferson, 4 for Burr and 2 were not cast.

1804 to 1832

Year	Presidential candidates	Party	Electoral vote	Vice-presidential candidates	Party	Electoral vote
1804 ¹	Thomas Jefferson	Dem.-Rep.	162	George Clinton	Dem.-Rep.	162
	Charles C. Pinckney	Federalist	14	Rufus King	Federalist	14
1808	James Madison	Dem.-Rep.	122	George Clinton	Dem.-Rep.	113
	Charles C. Pinckney	Federalist	47	Rufus King	Federalist	47
	George Clinton	Dem.-Rep.	6	John Langdon	Ind. (no party)	9
	Votes not cast		1	James Madison	Dem.-Rep.	3
				James Monroe	Dem.-Rep.	3
1812	James Madison	Dem.-Rep.	128	Elbridge Gerry	Dem.-Rep.	131
	DeWitt Clinton	Federalist	89	Jared Ingersoll	Federalist	86
1816	James Monroe	Dem.-Rep.	183	Daniel D. Tompkins	Dem.-Rep.	183
	Rufus King	Federalist	34	John E. Howard	Federalist	22
	Votes not cast		4	James Ross	Ind. (no party)	5
				John Marshall	Federalist	4
				Robert G. Harper	Ind. (no party)	3
1820	James Monroe	Dem.-Rep.	231	Daniel D. Tompkins	Dem.-Rep.	183
	John Q. Adams	Ind. (no party)	1	Richard Stockton	Ind. (no party)	6
				Daniel Rodney	Ind. (no party)	4
				Richard Rush	Ind. (no party)	1
				Robert G. Harper	Ind. (no party)	1
1824 ²	John Quincy Adams	(no party)	84	John C. Calhoun	(no party)	182
	Andrew Jackson	(no party)	99	Nathan Sanford	(no party)	30
	William H. Crawford	(no party)	41	Nathaniel Macon	(no party)	24
	Henry Clay	(no party)	37	Andrew Jackson	(no party)	13
				Martin Van Buren	(no party)	9
				Henry Clay	(no party)	2
				Votes not cast		1
1828	Andrew Jackson	Democratic	178	John C. Calhoun	Democratic	171
	John Quincy Adams	Nat'l Rep.	83	Richard Rush	Nat'l Rep.	83
1832	Andrew Jackson	Democratic	219	Martin Van Buren	Democratic	189
	Henry Clay	Nat'l Rep.	49	John Sergeant	Nat'l Rep.	49
	John Floyd	Ind. (no party)	11	Henry Lee	Ind. (no party)	11
	William Wirt ³	Antimasonic	7	Amos Ellmaker	Antimasonic	7
	Votes not cast		2	William Wilkins	Ind. (no party)	30

Presidential Election Results—(cont.)

1836 to 1868

Year	Presidential candidates	Party	Electoral vote	Vice-presidential candidates	Party	Electoral vote
1836	Martin Van Buren	Democratic	170	Richard M. Johnson ⁴	Democratic	147
	William H. Harrison	Whig	73	Francis Granger	Whig	77
	Hugh L. White	Whig	26	John Tyler	Democratic	47
	Daniel Webster	Whig	14	William Smith	Ind. (no party)	23
	W. P. Mangum	Ind. (no party)	11			
1840	William H. Harrison ⁵	Whig	234	John Tyler	Whig	234
	Martin Van Buren	Democratic	60	Richard M. Johnson	Democratic	48
				L. W. Tazewell	Ind. (no party)	11
1844	James K. Polk	Democratic	170	George M. Dallas	Democratic	170
	Henry Clay	Whig	105	Thomas Freylinghuysen	Whig	105
1848	Zachary Taylor ⁶	Whig	163	Millard Fillmore	Whig	163
	Lewis Cass	Democratic	127	William O. Butler	Democratic	127
1852	Franklin Pierce	Democratic	254	William R. King	Democratic	254
	Winfield Scott	Whig	42	William A. Graham	Whig	42
1856	James Buchanan	Democratic	174	John C. Breckinridge	Democratic	174
	John C. Fremont	Republican	114	William L. Dayton	Republican	114
	Millard Fillmore	Am. or Know Nothing	8	A. J. Donelson	Am. or Know Nothing	8
1860	Abraham Lincoln	Republican	180	Hannibal Hamlin	Republican	180
	John C. Breckinridge	Democratic	72	Joseph Lane	Democratic	72
	John Bell	Const. Union	39	Edward Everett	Const. Union	39
	Stephen A. Douglas	Democratic	12	H. V. Johnson	Democratic	12
1864	Abraham Lincoln ⁷	Republican	212	Andrew Johnson	Republican	212
	George B. McClellan	Democratic	21	G. H. Pendleton	Democratic	21
1868	Ulysses S. Grant	Republican	214	Schuyler Colfax	Republican	214
	Horatio Seymour	Democratic	80	Francis P. Blair, Jr.	Democratic	80
	Votes not counted ⁸		23	Votes not counted		23

¹First election in which President and Vice President were voted on separate ballots.²Since no candidate had a majority of the electoral vote, the House of Representatives had to select a President from the first three, voting as states. Since 13 states supported Adams, only 7 supported Andrew Jackson, and 4 William H. Crawford, John Quincy Adams was elected President.³The Antimasonic Party in 1832 was the first party to hold a nominating convention to choose its candidates for President and Vice President.⁴Since Johnson did not have a majority of the electoral votes, the Senate chose him over Granger, the others being legally out of the race.⁵John Tyler became President upon the death of William H. Harrison on April 4, 1841.⁶Millard Fillmore became President upon the death of Zachary Taylor on July 9, 1850.⁷Andrew Johnson became President upon the death of Abraham Lincoln on April 15, 1865.⁸23 Southern electoral votes were excluded.

1872 to 1896

Year	Presidential candidates	Party	Electoral vote	Popular vote	Vice-presidential candidates and party
1872 ¹	Ulysses S. Grant	Republican	286	3,597,132	Henry Wilson—R
	Horace Greeley	Dem., Liberal Rep.		2,834,125	B. Gratz Brown—D, LR
	Thomas A. Hendricks	Democratic	42		George W. Julian—D
	B. Gratz Brown	Dem., Liberal Rep.	18		A. H. Colquitt
	Charles J. Jenkins	Democratic	2		J. M. Palmer
	David Davis	Democratic	1		T. E. Bramlette
	Votes not counted		17		W. S. Groesbeck
1876 ²	Rutherford B. Hayes	Republican	185	4,033,768	William A. Wheeler—R
	Samuel J. Tilden	Democratic	184	4,285,992	Thomas A. Hendricks—D
	James A. Garfield ³	Republican	214	4,449,053	Chester A. Arthur—R
1880	Winfield S. Hancock	Democratic	155	4,442,035	William H. English—D
	Grover Cleveland	Democratic	219	4,911,017	Thomas A. Hendricks—D
1884	James G. Blaine	Republican	182	4,848,334	John A. Logan—R
	Benjamin Harrison	Republican	233	5,440,216	Levi P. Morton—R
1888	Grover Cleveland	Democratic	168	5,538,233	A. G. Thurman—D
	Grover Cleveland	Democratic	277	5,556,918	Adlai E. Stevenson—D
1892	Benjamin Harrison	Republican	145	5,176,108	Whitelaw Reid—R
	James B. Weaver	People's or Populist	22	1,041,028	James G. Field—P
1896	William McKinley	Republican	271	7,035,638	Garret A. Hobart—R
	William J. Bryan	Dem., People's or Pop.	176	6,467,946	Arthur Sewall—D
					Thomas E. Watson—P

PRESIDENTIAL ELECTION RESULTS—1900 to 1924

Year	Presidential candidates	Party	Electoral vote	Popular vote	Vice-presidential candidates and party
1900	William McKinley ⁴	Republican	292	7,219,530	Theodore Roosevelt—R
	William J. Bryan	Democratic	155	6,358,071	Adlai E. Stevenson—D
	Eugene V. Debs	Social Democrat	0	94,768	Job Harriman—SD
1904	Theodore Roosevelt	Republican	336	7,628,834	Charles W. Fairbanks—R
	Alton B. Parker	Democratic	140	5,084,491	Henry G. Davis—D
	Eugene V. Debs	Socialist	0	402,400	Benjamin Hanford—S
1908	William H. Taft	Republican	321	7,679,006	James S. Sherman—R
	William J. Bryan	Democratic	162	6,409,106	John W. Kern—D
	Eugene V. Debs	Socialist	0	420,820	Benjamin Hanford—S
1912	Woodrow Wilson	Democratic	435	6,286,214	Thomas R. Marshall—D
	Theodore Roosevelt ⁴	Progressive	88	4,126,620	Hiram Johnson—Prog
	William H. Taft	Republican	8	3,483,922	Nicholas M. Butler—R ⁵
1916	Eugene V. Debs	Socialist	0	897,011	Emil Seidel—S
	Woodrow Wilson	Democratic	277	9,129,606	Thomas R. Marshall—D
	Charles E. Hughes	Republican	254	8,538,221	Charles W. Fairbanks—R
1920	A. L. Benson	Socialist	0	538,221	G. R. Kirkpatrick—S
	Warren G. Harding ⁶	Republican	404	16,152,200	Calvin Coolidge—R
	James M. Cox	Democratic	127	9,147,353	Franklin D. Roosevelt—D
1924	Eugene V. Debs	Socialist	0	917,799	Seymour Stedman—S
	Calvin Coolidge	Republican	382	15,725,016	Charles G. Dawes—R
	John W. Davis	Democratic	136	8,385,586	Charles W. Bryan—D
	Robert M. LaFollette	Progressive, Socialist	13	4,822,856	Burton K. Wheeler—Prog, S

¹Horace Greeley died on Nov. 29, 1872 before his electors voted and so his 63 votes were scattered among many candidates. This was the first election in which every state chose its electors by popular vote.

²This election was disputed because of a double set of returns from La., S. C. and Fla., but a special electoral commission of 5 Supreme Court Justices, 5 Representatives and 5 Senators decided that the republican electors were the men legally chosen.

³Chester A. Arthur became President on death of James A. Garfield on Sept. 19, 1881.

⁴Theodore Roosevelt became President on death of William McKinley on Sept. 14, 1901.

⁵James S. Sherman, Republican candidate for Vice President, died on Oct. 30, and the Republican National Committee named Nicholas Murray Butler as Vice-Presidential candidate in his stead.

⁶Calvin Coolidge became President on death of Warren G. Harding on August 2, 1923.

Army and Navy Voting in 1944 Presidential Election

Source: U. S. Bureau of the Census.

(Includes voting by members of the armed forces, the merchant marine, the American Red Cross, and other organizations attached to and serving with the armed forces.)

State	Number of applications for ballots	Total received	Total valid	Percent of total popular vote	State	Number of applications for ballots	Total received	Total valid	Percent of total popular vote
Alabama.....	28,423	5,445	5,000	2.0	Nevada.....	4,768	3,289	3,065	5.7
Arizona.....	11,967	6,932	6,776	4.9	New Hampshire..	22,009	13,514	12,812	5.6
Arkansas.....	24,382	6,400	5,500	2.6	New Jersey.....	511,000	168,072	164,186	8.4
California.....	238,865	186,811	181,421	5.2	New Mexico.....	9,638	7,221	7,032	4.6
Colorado.....	43,525	30,044	28,348	5.6	New York.....	554,445	429,012	422,698	6.7
Connecticut.....	64,485	64,095	59,616	7.2	North Carolina...	86,999	49,837	49,541	6.3
Delaware.....	13,170	3,408	2,700	2.2	North Dakota....	16,318	11,016	10,440	4.7
Florida.....	45,965	30,540	29,423	6.1	Ohio.....	258,333	167,676	164,472	5.2
Georgia.....	43,100	36,528	32,941	10.0	Oklahoma.....	51,179	34,163	32,491	4.5
Iaho.....	18,846	13,037	11,276	5.4	Oregon.....	39,458	34,039	33,377	7.0
Illinois.....	101,191	173,244	162,256	4.0	Pennsylvania.....	554,332	255,769	255,226	6.7
Indiana.....	95,528	79,513	77,060	4.6	Rhode Island....	55,666	24,488	23,059	7.7
Iowa.....	69,896	50,290	47,362	4.5	South Carolina...	3,429	3,126	2,268	2.2
Kansas.....	41,156	31,303	30,593	4.2	South Dakota....	12,939	10,100	9,647	4.2
Kentucky.....	59,870	33,510	31,634	3.6	Tennessee.....	49,903	28,896	27,933	5.5
Louisiana.....	38,936	13,733	10,387	3.0	Texas.....	78,569	31,301	28,162	2.4
Maine.....	17,973	14,300	13,745	4.6	Utah.....	19,244	14,331	13,756	5.5
Maryland.....	43,209	35,244	34,534	5.7	Vermont.....	7,046	6,094	5,763	4.6
Massachusetts...	186,409	124,530	115,990	5.8	Virginia.....	70,355	38,579	38,475	9.9
Michigan.....	164,566	155,258	146,650	6.7	Washington.....	61,824	51,963	51,026	6.0
Minnesota.....	82,027	65,651	62,517	5.6	West Virginia...	54,237	40,162	38,993	5.4
Mississippi.....	19,360	7,121	5,270	2.9	Wisconsin.....	140,238	80,844	80,347	6.0
Missouri.....	103,305	77,671	74,439	4.7	Wyoming.....	8,945	8,319	8,150	8.0
Montana.....	12,568	9,425	9,340	4.5	Total.....	4,277,159	2,793,203	2,691,160	5.6
Nebraska.....	37,563	27,359	23,454	4.2					

Popular and Electoral Vote for President, Election of 1928

Source: Secretaries of State of the several states from records filed with the House of Representatives.

Candidates for President and Vice President:

Democratic, Alfred E. Smith, New York; Joseph T. Robinson, Arkansas.

Republican, Herbert Hoover, California; Charles Curtis, Kansas.

Socialist, Norman Thomas, New York; James H. Maurer, Pennsylvania.

Socialist Labor, John W. Alken, Massachusetts.

Prohibition, William F. Varney, New York; James A. Edgerton, Virginia.

Workers, William Z. Foster, Illinois; Benjamin Gitlow, New York.

Farmer-Labor, Frank E. Webb, California.

Note: Totals for all candidates is 36,772,922; added to this are 106,492 void or scattering votes and blank or defective ballots.

State	Total	Dem.	Rep.	Plur.	Electoral D R	Soc.	Soc. Lab.	Prohibition	Others
Alabama.....	248,982	127,797	120,725	7,072 D	12	..	460	.....	.....
Arizona.....	91,254	38,537	52,533	13,996 R	..	3	.....	.....	184
Arkansas.....	197,693	119,196	77,751	41,445 D	9	..	429	.....	317
California.....	1,796,656	614,365	1,162,323	547,958 R	..	13	19,595	.....	216
Colorado.....	392,242	133,131	253,872	120,741 R	..	6	3,472	.....	1,767
Connecticut.....	553,031	252,040	296,614	44,574 R	..	7	3,019	622	730
Delaware.....	105,891	36,643	68,860	32,217 R	..	3	329	.....	59
Florida.....	253,674	101,764	144,168	42,404 R	..	6	4,036	.....	3,704
Georgia.....	229,159	129,602	63,498	66,104 D	14	..	124	.....	64
Idaho.....	154,230	53,074	99,848	46,774 R	..	4	1,308	.....	.....
Illinois.....	3,107,489	1,313,817	1,769,141	455,324 R	..	29	19,138	1,812	3,581
Indiana.....	1,421,314	562,691	848,290	285,599 R	..	15	3,871	645	5,496
Iowa.....	1,009,362	378,936	623,818	244,882 R	..	13	2,960	230	3,416
Kansas.....	713,200	193,003	513,672	320,669 R	..	10	6,205	.....	32
Kentucky.....	940,604	381,070	558,064	176,994 R	..	13	837	340	293
Louisiana.....	215,833	164,655	51,160	113,495 D	10	..	.....	.....	.....
Maine.....	262,171	81,179	179,923	98,744 R	..	6	1,068	.....	.....
Maryland.....	528,348	223,626	301,479	77,853 R	..	8	1,701	906	636
Massachusetts.....	1,577,827	792,758	775,566	17,192 D	18	..	6,262	773	2,464
Michigan.....	1,372,082	396,762	965,396	568,634 R	..	15	3,516	799	2,728
Minnesota.....	970,976	396,451	560,977	164,526 R	..	12	6,774	1,921	4,853
Mississippi.....	151,692	124,539	27,153	97,386 D	10	..	.....	.....	.....
Missouri.....	1,509,721	662,562	834,080	171,518 R	..	18	3,739	340	.....
Montana.....	194,108	78,578	113,300	34,722 R	..	4	1,667	.....	563
Nebraska.....	547,138	197,959	345,745	147,786 R	..	8	3,434	.....	.....
Nevada.....	32,417	14,090	18,327	4,237 R	..	3	.....	.....	.....
New Hampshire.....	196,747	80,715	115,404	34,689 R	..	4	455	.....	173
New Jersey.....	1,549,381	616,517	926,050	309,533 R	..	14	4,897	500	1,257
New Mexico.....	118,014	48,211	69,645	21,434 R	..	3	.....	.....	158
New York.....	4,466,072	2,089,863	2,193,344	103,481 R	..	45	107,332	4,211	10,876
North Carolina.....	636,070	287,078	348,992	61,914 R	..	12	.....	.....	.....
North Dakota.....	239,867	106,648	131,441	24,793 R	..	5	842	.....	936
Ohio.....	2,508,346	864,210	1,627,546	763,336 R	..	24	8,683	1,515	3,556
Oklahoma.....	618,427	219,174	394,046	174,872 R	..	10	3,924	.....	1,283
Oregon.....	319,942	109,223	205,341	96,118 R	..	5	2,720	1,564	1,094
Pennsylvania.....	3,150,615	1,067,586	2,055,382	967,796 R	..	38	18,647	380	3,880
Rhode Island.....	242,784	118,973	117,522	1,451 D	5	..	.....	416	283
South Carolina.....	68,605	62,700	3,138	59,512 D	9	..	47	.....	.....
South Dakota.....	261,865	102,660	157,603	54,843 R	..	5	443	.....	1,159
Tennessee.....	363,473	167,343	195,388	28,045 R	..	12	631	.....	111
Texas.....	708,999	341,032	367,036	26,004 R	..	20	722	.....	209
Utah.....	176,604	80,985	94,618	13,633 R	..	4	954	.....	47
Vermont.....	135,191	44,440	90,404	45,964 R	..	4	.....	338	.....
Virginia.....	305,358	140,146	164,609	24,463 R	..	12	250	180	173
Washington.....	500,840	156,772	335,844	179,072 R	..	7	2,615	4,068	1,541
West Virginia.....	642,752	263,784	375,551	111,967 R	..	8	1,313	.....	401
Wisconsin.....	1,016,872	450,259	544,205	93,946 R	..	13	18,213	381	2,245
Wyoming.....	84,496	29,299	52,748	23,449 R	..	3	788	.....	1,528
Total.....	36,879,414	15,016,443	21,392,190	6,375,747 R	87	444	267,420	21,603	20,106

Total for Georgia includes 35,871 Anti-Smith votes; for South Carolina, 2,670 votes. Breakdown of other parties: Workers, 48,770; Farmer-Labor, 6,390.

Popular and Electoral Vote for President, Election of 1932

Source: Secretaries of State of the several states from records filed with the House of Representatives.

Candidates for President and Vice President:

Democratic, Franklin D. Roosevelt, New York; John N. Garner, Texas.
 Republican, Herbert Hoover, California; Charles Curtis, Kansas.
 Socialist, Norman Thomas, New York; James H. Maurer, Pennsylvania.
 Socialist Labor, Verne L. Reynolds, New York; John W. Aiken, Massachusetts.
 Prohibition, William D. Upshaw, Georgia; Frank S. Regan, Illinois.
 Communist, William Z. Foster, Illinois; James W. Ford, New York.
 Liberty, W. H. Harvey, Arkansas; F. B. Hemenway, Washington.
 Farmer-Labor, Jacob S. Coxey, Ohio.

State	Total	Dem.	Rep.	Plur.	Electoral D R	Soc.	Soc. Lab.	Prohibi- tion	Others
Alabama	245,034	207,910	34,675	173,235 D	11 ..	2,030	.....	13	406
Arizona	118,251	79,264	36,104	43,160 D	3 ..	2,618	.....	.....	256
Arkansas	22,220,562	189,602	28,467	161,135 D	9 ..	1,269	.....	.....	1,224
California	2,266,972	1,324,157	847,902	476,252 D	22 ..	63,299	.....	20,637	10,977
Colorado	457,696	250,877	189,617	61,260 D	6 ..	13,591	427	1,928	469
Connecticut	594,207	281,632	288,420	6,788 R	.. 8	20,480	2,287	.....	24
Delaware	112,901	54,319	57,073	2,754 R	.. 3	1,376	.....	.....	133
Florida	276,252	206,307	69,170	137,137 D	7 ..	775	.....	.....	.....
Georgia	255,590	234,118	19,863	214,255 D	12 ..	461	.....	1,125	23
Idaho	186,520	109,479	71,312	38,167 D	4 ..	526	.....	.....	5,203
Illinois	3,407,926	1,882,304	1,432,756	449,548 D	29 ..	67,258	3,638	6,388	15,582
Indiana	1,576,927	862,054	677,184	184,870 D	14 ..	21,388	2,070	10,399	3,832
Iowa	1,036,687	598,019	414,433	183,586 D	11 ..	20,467	.....	2,111	1,653
Kansas	791,978	424,204	349,498	74,706 D	9 ..	18,276	.....	.....	.....
Kentucky	983,063	580,574	394,716	185,858 D	11 ..	3,853	1,396	2,252	277
Louisiana	268,804	249,418	18,853	230,565 D	10 ..	.....	.....	.....	.....
Maine	298,444	128,907	166,631	37,724 R	.. 5	2,489	255	.....	162
Maryland	511,054	314,314	184,184	130,130 D	8 ..	10,489	1,036	.....	1,031
Massachusetts	1,580,114	800,148	736,959	63,189 D	17 ..	34,305	2,668	1,142	4,892
Michigan	1,664,628	871,700	739,894	131,806 D	19 ..	39,205	1,401	2,893	9,535
Minnesota	1,002,843	600,806	363,959	236,847 D	11 ..	25,476	770	.....	12,602
Mississippi	146,034	140,168	5,180	134,988 D	9 ..	686	.....	.....	.....
Missouri	1,609,894	1,025,406	564,713	460,693 D	15 ..	16,374	404	2,429	568
Montana	216,479	127,286	78,078	49,208 D	4 ..	7,891	.....	.....	3,224
Nebraska	570,135	359,082	201,177	157,905 D	7 ..	9,876	.....	.....	.....
Nevada	41,430	28,756	12,674	16,082 D	3 ..	.....	.....	.....	.....
New Hampshire	205,520	100,680	103,629	2,949 R	.. 4	947	.....	.....	264
New Jersey	1,630,063	806,630	775,684	30,946 D	16 ..	42,998	1,062	774	2,915
New Mexico	151,606	95,089	54,217	40,872 D	3 ..	1,776	.....	.....	524
New York	4,753,698	2,534,959	1,937,963	596,996 D	47 ..	177,397	10,339	.....	93,040
North Carolina	711,501	497,566	208,344	289,222 D	13 ..	5,591	.....	.....	.....
North Dakota	256,290	178,350	71,772	106,578 D	4 ..	3,521	.....	.....	2,647
Ohio	2,610,088	1,301,695	1,227,679	74,016 D	26 ..	64,094	1,968	7,421	7,231
Oklahoma	704,633	516,468	188,165	328,303 D	11 ..	.....	.....	.....	.....
Oregon	368,751	213,871	136,019	77,852 D	5 ..	15,450	1,730	.....	1,681
Pennsylvania	2,859,002	1,295,948	1,453,540	157,592 R	.. 36	91,119	659	11,319	6,417
Rhode Island	266,170	146,604	115,266	31,338 D	4 ..	3,138	433	183	546
South Carolina	104,407	102,347	1,978	100,469 D	8 ..	82	.....	.....	.....
South Dakota	288,438	183,515	99,212	84,303 D	4 ..	1,551	.....	463	3,697
Tennessee	390,638	259,817	126,806	133,011 D	11 ..	1,786	.....	1,995	234
Texas	863,426	760,348	97,959	662,389 D	23 ..	4,450	.....	.....	669
Vermont	206,579	116,750	84,795	31,955 D	4 ..	4,087	.....	.....	947
Virginia	136,980	56,266	78,984	22,718 R	.. 3	1,533	.....	.....	197
Washington	297,942	203,979	89,637	114,342 D	11 ..	2,382	.....	1,843	101
West Virginia	614,814	353,260	208,645	144,615 D	8 ..	17,080	1,009	1,540	33,280
Wisconsin	743,774	405,124	330,731	74,393 D	8 ..	5,133	.....	2,342	444
Wyoming	1,114,815	707,410	347,741	359,669 D	12 ..	53,379	494	2,672	3,119
.....	96,962	54,370	39,583	14,787 D	3 ..	2,829	.....	.....	180
Totals	39,816,522	22,821,857	15,761,841	7,060,016 D	472 59	884,781	33,276	81,869	232,898

Breakdown of other parties: Communist, 102,991; Liberty, 53,425; Farmer-Labor, 7,309; Scattered, 69,173.

Popular and Electoral Vote for President, Election of 1936

Source: Secretaries of State of the several states from records filed with the House of Representatives.

Candidates for President and Vice President:

Democratic, Franklin D. Roosevelt, New York; John N. Garner, Texas.

Republican, Alfred M. Landon, Kansas; Frank Knox, Illinois.

Socialist, Norman Thomas, New York; George Nelson, Wisconsin.

Prohibition, D. Leigh Colvin, New York; Claude A. Watson, California.

Union, William Lemke, North Dakota; Thomas C. O'Brien, Massachusetts.

Socialist Labor, John W. Aiken, Massachusetts; Emil F. Teichert, New York.

State	Total	Dem.	Rep.	Plur.	Electoral D R	Soc.	Prohibi- tion	Com- munist	Others
Alabama	275,744	238,196	35,358	202,838	D 11	242	719	678	551
Arizona	124,163	86,722	33,433	53,289	D 3	317	384		3,307
Arkansas	179,423	146,765	32,039	114,726	D 9	446		169	4
California	2,638,882	1,766,836	836,431	930,405	D 22	11,331	12,917	10,877	490
Colorado	488,676	295,021	181,267	113,754	D 6	1,593		497	10,298
Connecticut	690,783	382,189	278,685	103,504	D 8	5,682		1,193	21,805
Delaware	127,603	69,702	54,014	15,688	D 3	172		51	3,664
Florida	327,365	249,117	78,248	170,869	D 7				
Georgia	293,178	255,364	36,942	218,422	D 12	68	663		141
Idaho	199,623	125,683	66,256	59,427	D 4				7,684
Illinois	3,956,522	2,282,999	1,570,393	712,606	D 29	7,530	3,439	801	91,360
Indiana	1,650,897	934,974	691,570	243,404	D 14	3,856		1,090	19,407
Iowa	1,142,733	621,756	487,977	133,779	D 11	1,373	1,182	506	29,939
Kansas	865,013	464,520	397,727	66,793	D 9	2,766			
Kentucky	926,206	541,944	369,702	172,242	D 11	632	929	204	12,795
Louisiana	329,778	292,894	36,791	256,103	D 10				93
Maine	304,240	126,333	168,823	42,490	R ..	783	334	257	7,710
Maryland	624,896	389,612	231,435	158,177	D 8	1,629		915	1,305
Massachusetts	1,840,357	942,716	768,613	174,103	D 17	5,111	1,032	2,930	119,995
Michigan	1,805,093	1,016,794	699,733	317,061	D 19	8,208	579	3,384	76,395
Minnesota	1,129,975	698,811	350,461	348,350	D 11	2,872		2,574	75,257
Mississippi	162,090	157,318	4,443	152,875	D 9	329			
Missouri	1,828,635	1,111,043	697,891	413,152	D 15	3,454	908	417	14,922
Montana	230,512	159,690	63,598	96,092	D 4	1,066	224	385	5,549
Nebraska	608,032	347,454	247,731	100,323	D 7				12,847
Nevada	43,848	31,925	11,923	20,002	D 3				
New Hampshire	218,114	108,460	104,642	3,798	D 4			193	4,819
New Jersey	1,820,437	1,083,850	720,322	363,528	D 16	3,931	926	1,639	9,769
New Mexico	168,920	105,838	61,710	44,128	D 3	343	62	43	924
New York	5,596,398	3,293,222	2,180,670	837,628	D 47	86,897		35,609	
North Carolina	839,462	616,141	223,283	392,858	D 13	21		11	6
North Dakota	273,716	163,148	72,751	90,397	D 4	552	197	360	36,708
Ohio	3,012,425	1,747,122	1,127,709	619,413	D 26	117		5,251	132,226
Oklahoma	749,740	501,069	245,122	255,947	D 11	2,221	1,328		
Oregon	414,021	266,733	122,706	144,027	D 5	2,143	4	104	22,321
Pennsylvania	4,138,105	2,353,788	1,690,300	663,488	D 36	14,375	6,691	4,060	68,891
Rhode Island	311,149	165,233	125,012	40,221	D 4	924		411	20,493
South Carolina	115,437	113,791	1,646	112,145	D 8				
South Dakota	296,452	160,137	125,977	34,160	D 4				
Tennessee	475,531	327,083	146,516	180,567	D 11	685	632	319	296
Texas	843,482	734,485	103,874	630,611	D 23	1,075	514	253	3,281
Utah	216,677	150,246	64,555	85,691	D 4	432	43	280	1,121
Vermont	143,689	62,124	81,023	18,899	R ..	3		405	137
Virginia	334,590	234,980	98,336	136,644	D 11	313	594	98	269
Washington	692,338	495,579	206,892	252,687	D 8	3,496	1,041	1,907	19,423
West Virginia	830,073	502,582	325,486	177,096	D 8	832	1,173		
Wisconsin	1,258,712	802,984	380,828	422,156	D 12	10,626	1,071	2,197	61,006
Wyoming	103,382	62,624	38,739	23,885	D 3	200	75	91	1,653
Total	45,647,117	27,751,597	16,679,583	10,797,090	D 523	8	187,720	37,661	80,159

¹Includes 274,924 American Labor votes. 10,536; Scattered, 17,382.

Breakdown of other parties: Union, 882,479; Socialist Labor,

Popular and Electoral Vote for President, Election of 1940

Source: Secretaries of State of the several States, from accounts filed with the House of Representatives.

Candidates for President and Vice President:

Democratic—Franklin D. Roosevelt and Henry A. Wallace

Republican—Wendell L. Willkie and Charles L. McNary

Socialist—Norman Thomas and Maynard C. Krueger

Prohibition—Roger W. Babson and Edgar V. Moorman

Communist—Earl Browder and James W. Ford

State	Total	Democrat	Republican	Plurality	Electoral Dem. Rep.	Socialist	Prohibition	Communist	Other votes
Alabama.....	294,219	250,726	42,184	208,542 D	11	100	700	509	.....
Arizona.....	150,039	95,267	54,030	41,237 D	3	..	742	.....	.....
Arkansas.....	200,743	158,622	42,121	116,501 D	9	..	.....	.....	.....
California.....	3,268,791	1,877,618	1,351,419	526,199 D	22	..	9,400	13,586	16,768
Colorado.....	549,004	265,554	279,576	14,022 R	6	1,899	1,597	378	.....
Connecticut.....	781,502	417,621	361,819	55,802 D	8	..	.....	1,091	971
Delaware.....	136,374	74,599	61,440	13,159 D	3	115	220	.....	.....
Florida.....	485,492	359,334	126,158	233,176 D	7	..	.....	.....	.....
Georgia.....	312,539	265,194	23,934	241,260 D	12	..	983	.....	22,428
Idaho.....	235,168	127,842	106,553	21,289 D	4	497	.....	276	.....
Illinois.....	4,217,935	2,149,934	2,047,240	102,694 D	29	10,914	9,190	.....	657
Indiana.....	1,782,747	874,063	899,466	25,403 R	14	2,075	6,437	.....	706
Iowa.....	1,215,430	578,800	632,370	53,570 R	11	..	2,284	1,524	452
Kansas.....	860,297	364,725	489,169	124,444 R	9	2,347	4,056	.....	.....
Kentucky.....	970,063	557,222	410,384	146,838 D	11	1,014	1,443	.....	.....
Louisiana.....	372,305	319,751	52,446	267,305 D	10	..	.....	.....	108
Maine.....	320,840	156,478	163,951	7,473 R	5	..	.....	411	.....
Maryland.....	660,104	384,546	269,534	115,012 D	8	4,093	1,274	.....	657
Massachusetts.....	2,026,993	1,076,522	939,700	136,822 D	17	4,091	1,370	3,806	1,504
Michigan.....	2,085,925	1,032,991	1,039,917	6,926 R	19	7,593	1,795	2,834	795
Minnesota.....	1,251,188	644,196	596,274	47,922 D	11	5,454	2,711	.....	2,553
Mississippi.....	175,824	168,267	2,814	165,453 D	9	193	.....	.....	4,550
Missouri.....	1,833,729	958,476	871,009	87,467 D	15	2,226	1,809	.....	209
Montana.....	247,873	145,698	99,579	46,119 D	4	1,443	664	489	.....
Nebraska.....	615,878	263,677	352,201	88,524 R	7	..	.....	.....	.....
Nevada.....	53,174	31,945	21,229	10,716 D	3	..	.....	.....	.....
New Hampshire.....	235,419	125,292	110,127	15,165 D	4	..	.....	.....	.....
New Jersey.....	1,972,552	1,016,808	945,475	71,333 D	16	2,433	873	6,508	455
New Mexico.....	183,014	103,699	79,315	24,384 D	3	..	.....	.....	.....
New York.....	6,301,596	3,251,918*	3,027,478	224,440 D	47	18,950	3,250	.....	.....
North Carolina.....	822,648	609,015	213,633	395,382 D	13	..	.....	.....	.....
North Dakota.....	280,775	124,036	154,590	30,554 R	4	1,279	325	.....	545
Ohio.....	3,319,912	1,733,139	1,586,773	146,366 D	26	..	.....	.....	.....
Oklahoma.....	826,212	474,313	348,872	125,441 D	11	.....	3,027	.....	.....
Oregon.....	481,240	258,415	219,555	38,860 D	5	398	154	191	2,517
Pennsylvania.....	4,078,714	2,171,035	1,889,848	281,187 D	36	10,967	.....	4,519	2,345
Rhode Island.....	319,649	181,122	138,214	42,908 D	4	..	74	239	.....
South Carolina.....	99,830	95,470	1,727	93,743 D	8	..	.....	.....	2,633
South Dakota.....	308,427	131,362	177,065	45,703 R	4	..	.....	.....	.....
Tennessee.....	522,823	351,601	169,153	182,448 D	11	463	1,606	.....	.....
Texas.....	1,041,168	840,151	199,152	640,999 D	23	728	925	212	.....
Vermont.....	247,817	154,277	93,151	61,126 D	4	198	.....	191	.....
Virginia.....	143,062	64,269	78,371	14,102 R	3	.....	.....	411	11
Washington.....	346,607	235,961	109,363	126,598 D	11	282	882	71	48
West Virginia.....	793,833	462,145	322,123	140,022 D	8	4,586	1,686	2,626	667
Wisconsin.....	868,076	495,662	372,414	123,248 D	8	..	.....	.....	1,882
Wyoming.....	1,405,522	704,821	679,206	25,615 D	12	15,071	2,148	2,394	.....
.....	112,240	59,287	52,633	6,654 D	3	148	172	.....	.....
Total.....	49,815,312	27,243,466	22,304,755	4,938,711 D	449	82	99,557	57,812	46,251 63,471

*Includes 417,418 American Labor (Roosevelt-Wallace), New York State.

Other votes: California, Progressive 16,506, Scattering 262; Connecticut, Socialist-Labor 971; Georgia, Independent Democrats 22,428; Illinois, Scattering 657; Indiana, Scattering 706; Iowa, Socialist-Labor 452; Louisiana, Independents 108; Maryland, Labor Party of Maryland 657; Massachusetts, Socialist-Labor 1,492; Minnesota, Independents 108; Michigan, Social-Labor 795; Minnesota, Industrial 2,553; Mississippi, Independent Republicans 450; Missouri, Socialist-Labor 209; New Jersey, Socialist-Labor 455; North Dakota, Alfred Knutson 545; Oregon, Socialist-Labor 2,487; Pennsylvania, Independent Government 1,518, Scattering 827; South Carolina, Jeffersonian Democrats 2,496, Republican (Tolbert Faction) 137; Vermont, Scattering 11; Virginia, Socialist-Labor 667; Washington, Socialist-Labor 667; Wisconsin, Socialist-Labor 1,882.

Popular and Electoral Vote for President, Election of 1944

Source: Secretaries of State of the several states from records filed with the House of Representatives.

Candidates for President and Vice President:

Democratic—Franklin D. Roosevelt, New York; Harry S. Truman, Missouri.

Republican—Thomas E. Dewey, New York; John W. Bricker, Ohio.

Socialist—Norman Thomas, New York; Darlington Hoopes, Pennsylvania.

Prohibition—Claude A. Watson, California; Andrew Johnson, Kentucky.

Socialist-Labor¹—Edward A. Teichert, Pennsylvania; Arla A. Albaugh, Ohio.

State	Total vote	Dem.	Rep.	Plurality	Electoral Dem. Rep.	Soc.	Prohib.	Soc.- Lab.	Other
Alabama.....	244,743	198,918	44,540	154,378 D	11 —	190	1,095	—	—
Arizona.....	137,634	80,926	56,287	24,639 D	4 —	—	421	—	—
Arkansas.....	212,954	148,965	63,551	85,414 D	9 —	438	—	—	—
California.....	3,520,875	1,988,564	1,512,965	475,599 D	25 —	3,923	14,770	327	320
Colorado.....	505,039	234,331	268,731	34,400 R	— 6	1,977	—	—	—
Connecticut.....	831,990	435,145	390,527	44,619 D	8 —	5,097	—	1,220	—
Delaware.....	125,361	68,166	56,747	11,419 D	3 —	154	294	—	—
Florida.....	482,592	339,377	143,215	196,162 D	8 —	—	—	—	—
Georgia.....	328,111	268,187	56,506	211,681 D	12 —	—	36	—	3,387
Idaho.....	208,321	107,399	100,137	7,262 D	4 —	282	503	—	—
Illinois.....	4,036,061	2,079,479	1,939,314	140,165 D	28 —	180	7,411	9,677	—
Indiana.....	1,672,091	781,403	875,891	94,488 R	— 13	2,223	12,574	—	—
Iowa.....	1,052,599	499,876	547,267	47,391 R	— 10	1,511	3,752	193	—
Kansas.....	733,776	287,458	442,096	154,638 R	— 8	1,613	2,609	—	—
Kentucky.....	867,921	472,589	392,448	80,141 D	11 —	535	2,023	326	—
Louisiana.....	349,383	281,564	67,750	213,814 D	10 —	—	—	—	69
Maine.....	296,400	140,631	155,434	14,803 R	— 5	—	—	335	—
Maryland.....	608,439	315,490	292,949	22,541 D	8 —	—	—	—	—
Massachusetts.....	2,009,993	1,035,296	921,350	113,946 D	16 —	—	973	2,780	—
Michigan.....	2,205,217	1,106,899	1,084,423	22,476 D	19 —	4,598	6,503	1,264	1,530
Minnesota.....	1,125,529	589,864	527,416	62,448 D	11 —	5,073	—	3,176	—
Mississippi.....	180,080	158,515	3,742	154,773 D	9 —	—	—	—	17,823
Missouri.....	1,571,678	807,357	761,175	46,182 D	15 —	1,750	1,175	221	—
Montana.....	207,355	112,556	93,163	19,393 D	4 —	1,296	340	—	—
Nebraska.....	563,126	233,246	329,880	96,634 R	— 6	—	—	—	—
Nevada.....	54,234	29,623	24,611	5,012 D	3 —	—	—	—	—
New Hampshire.....	229,625	119,663	109,916	9,757 D	4 —	46	—	—	—
New Jersey.....	1,963,761	987,874	961,335	26,539 D	16 —	3,358	4,255	6,939	—
New Mexico.....	152,225	81,389	70,688	10,701 D	4 —	—	148	—	—
New York.....	6,316,790	3,304,238*	2,987,647	316,591 D	47 —	10,553	—	14,352	—
North Carolina.....	790,554	527,399	263,155	264,244 D	14 —	—	—	—	—
North Dakota.....	220,171	100,144	118,535	18,391 R	— 4	943	549	—	—
Ohio.....	3,153,056	1,570,763	1,582,293	11,530 R	— 25	—	—	—	—
Oklahoma.....	722,636	401,549	319,424	82,125 D	10 —	—	1,663	—	—
Oregon.....	480,147	248,635	225,365	23,270 D	6 —	3,785	2,362	—	—
Pennsylvania.....	3,794,787	1,940,479	1,835,048	105,431 D	35 —	11,721	5,750	1,789	—
Rhode Island.....	299,276	175,356	123,487	51,869 D	4 —	—	433	—	—
South Carolina.....	103,375	90,601	4,547	86,054 D	8 —	—	365	—	7,862
South Dakota.....	232,076	96,711	135,365	38,654 R	— 4	—	—	—	—
Tennessee.....	510,792	308,707	200,311	108,396 D	12 —	892	882	—	—
Texas.....	1,150,330	821,605	191,425	630,180 D	23 —	594	1,017	—	135,689
Utah.....	248,319	150,088	97,891	52,197 D	4 —	340	—	—	—
Vermont.....	125,361	53,820	71,527	17,707 R	— 3	—	—	—	14
Virginia.....	388,485	242,276	145,243	97,033 D	11 —	417	459	90	—
Washington.....	856,328	486,774	361,689	125,085 D	8 —	3,824	2,396	1,645	—
West Virginia.....	715,596	392,777	322,819	69,958 D	8 —	—	—	—	—
Wisconsin.....	1,339,152	650,413	674,532	24,119 R	— 12	13,205	—	1,002	—
Wyoming.....	101,340	49,419	51,921	2,502 R	— 3	—	—	—	—
Total.....	48,025,684	25,602,505	22,006,278	3,596,227 D	432 99	80,518	74,758	45,336	216,289

¹Industrial government candidates in Minnesota, New York and Pennsylvania.

*Includes 496,405 American Labor Party, 329,235 Liberal Party votes.

Other votes: California, 326 scattering; Georgia, Ind. Dem., 3,373, 9 scattering; Louisiana, 69 Independents; Michigan, 1,530 America First Party; Mississippi, 9,964 Regular Democrats, 7,859 Independent Republicans; South Carolina, 7,799 Southern Democrats, Independent Republicans, 63; Texas, 135,439 Texas Regulars, 250 America First Party; Vermont, 14 scattering.

Popular Vote for President by Counties, 1944

Source: Official election returns.

ALABAMA

County	1944	
	Dem.	Rep.
Autauga	1,242	117
Baldwin	2,002	695
Barbour	2,237	67
Bibb	1,287	244
Bout	2,134	998
Bullock	1,056	24
Butler	1,915	80
Calhoun	4,308	694
Chambers	3,458	194
Cherokee	1,774	408
Civil	1,984	1,385
Claiborne	1,243	86
Crawford	2,263	142
Cullman	1,535	741
Dale	948	504
De Kalb	2,846	115
Elbert	3,386	496
Etowah	1,498	127
Fayette	1,079	394
Franklin	2,972	256
Greene	1,980	118
Hall	3,898	2,202
Harris	2,094	325
Hughes	2,883	149
Jackson	4,366	2,627
Jefferson	3,108	184
Lamar	2,077	266
Lauderdale	5,895	1,525
Lawrence	1,648	913
Lee	2,709	1,853
Liberty	2,004	385
Madison	676	45
Marengo	1,265	33
Marshall	1,635	46
Monroe	3,349	282
Murphy	2,967	1,026
Nelson	31,101	7,409
Okfuskee	2,025	310
Ozark	4,001	590
Perry	1,893	565
Pike	2,011	134
Polk	2,605	129
Porter	802	16
Randolph	1,032	82
Shelby	4,951	455
St. Clair	1,746	89
Tallapoosa	1,866	1,260
Telford	3,356	1,200
Trotter	9,439	2,867
Union	1,991	46
Washington	9,143	381
Wilcox	4,124	664
Winston	1,004	47
Yavapai	1,482	209
Yuma	2,328	90
Ziegl	1,785	702
Adams	2,109	115
Albany	1,819	1,117
Albion	1,955	945
Albion	1,075	53
Albion	3,102	675
Albion	3,326	136

ALABAMA (cont.)

County	1944	
	Dem.	Rep.
Tuscaloosa	4,939	584
Walker	4,619	2,241
Washington	1,447	115
Wilcox	1,209	30
Winston	912	1,538
Totals	198,918	44,540

Other party votes 1944: Prohibition 1,069; Socialist 190; total state vote 1944: 244,717.

ARIZONA

County	1944	
	Dem.	Rep.
Apache	1,238	728
Cochise	6,935	3,371
Coconino	2,236	1,786
Gila	4,818	2,260
Graham	2,393	1,151
Greenlee	1,956	739
Maricopa	32,197	24,853
Mohave	1,303	974
Navajo	2,660	1,579
Pima	13,006	10,850
Pinal	3,026	1,909
Santa Cruz	1,291	727
Yavapai	4,395	3,529
Yuma	3,472	1,831
Totals	80,926	56,287

Other party votes 1944: Prohibition 421; total state vote 1944: 137,634.

ARKANSAS

County	1944	
	Dem.	Rep.
Arkansas	1,711	1,031
Ashley	2,169	285
Baxter		
Benton	2,861	3,305
Boone	2,132	1,349
Bradley	1,710	162
Calhoun	906	122
Carroll	1,464	1,176
Chicot	1,552	270
Clark	1,981	637
Clay	1,934	1,422
Cleburne	839	582
Cleveland	960	150
Columbia	2,145	394
Conway	1,579	639
Craighead	3,582	1,474
Crawford	1,702	1,141

ARKANSAS (cont.)

County	1944	
	Dem.	Rep.
Crittenden	1,548	372
Cross	1,724	452
Dallas	1,238	266
Desha	1,175	186
Drew	1,370	320
Faulkner	2,332	897
Franklin	1,188	457
Fulton	660	525
Garland	3,596	2,069
Grant	1,088	334
Greene	2,565	928
Hempstead	2,157	624
Hot Spring	1,646	853
Howard	1,538	576
Independence	1,779	1,192
Izard	853	402
Jackson	2,318	414
Jefferson	4,095	1,578
Johnson	1,311	593
Lafayette	1,150	177
Lawrence	1,810	927
Lee	1,118	275
Lincoln	1,034	141
Little River	961	326
Logan	2,269	1,279
Lonoke	2,064	697
Madison	1,788	2,125
Marion	842	414
Miller	2,873	972
Mississippi	3,938	1,292
Monroe	1,311	291
Montgomery	573	349
Nevada	1,353	415
Newton	710	934
Perry	710	285
Phillips	2,046	501
Pike	877	405
Poinsett	2,506	311
Polk	999	764
Pope	2,048	805
Prairie	1,117	465
Pulaski	16,470	6,069
Quachita	3,154	473
Randolph		
St. Francis	1,654	446
Saline	2,556	643
Scott	898	348
Searcy	891	1,409
Sebastian	6,008	3,452
Sevier	1,356	389
Sharp		
Stone	592	549
Union	4,624	833
Van Buren	1,090	655
Washington	3,089	3,084
White	2,532	1,346
Woodruff	1,377	279
Yell	1,642	489
Totals	145,438	61,791

Other party votes 1944: Socialist 396; total state vote 1944: 207,625.

CALIFORNIA

County	1944	
	Dem.	Rep.
Alameda.....	169,631	122,982
Alpine.....	45	98
Amador.....	1,976	1,191
Butte.....	8,811	7,852
Calaveras.....	1,893	1,455
Colusa.....	2,090	1,579
Contra Costa.....	47,831	26,816
Del Norte.....	818	1,011
El Dorado.....	3,016	1,990
Fresno.....	40,769	22,668
Glenn.....	2,422	2,409
Humboldt.....	12,083	9,127
Imperial.....	5,085	5,979
Inyo.....	1,647	1,699
Kern.....	26,205	20,730
Kings.....	6,591	3,468
Lake.....	1,671	2,059
Lassen.....	3,678	1,896
Los Angeles.....	866,252	666,441
Madera.....	4,276	2,865
Marin.....	14,516	13,304
Mariposa.....	1,203	965
Mendocino.....	5,452	4,655
Merced.....	9,192	6,518
Modoc.....	1,540	1,288
Mono.....	242	378
Monterey.....	14,342	12,246
Napa.....	7,748	7,092
Nevada.....	3,266	2,648
Orange.....	28,649	38,394
Placer.....	7,149	4,196
Plumas.....	2,625	1,126
Riverside.....	19,439	23,168
Sacramento.....	49,204	24,611
San Benito.....	1,998	2,253
San Bernardino.....	38,530	34,084
San Diego.....	89,959	75,746
San Francisco.....	208,609	134,163
San Joaquin.....	27,074	24,357
San Luis Obispo.....	8,068	7,793
San Mateo.....	34,594	33,590
Santa Barbara.....	15,721	13,647
Santa Clara.....	43,869	39,409
Santa Cruz.....	9,357	11,102
Shasta.....	5,798	4,023
Sierra.....	662	443
Siskiyou.....	5,914	4,351
Solano.....	24,335	10,361
Sonoma.....	15,949	16,309
Stanislaus.....	15,537	14,297
Sutter.....	3,083	3,111
Tehama.....	3,130	2,903
Trinity.....	770	567
Tulare.....	16,221	16,005
Tuolumne.....	2,566	1,864
Ventura.....	16,342	11,071
Yolo.....	5,837	4,233
Yuba.....	3,254	2,379
Totals.....	1,988,564	1,512,965

Other party votes 1944: Prohibition 14,770; Socialist Labor 327; Socialist 3,923; Others 326; total state vote 1944: 3,620,875.

COLORADO

County	1944	
	Dem.	Rep.
Adams.....	4,101	4,933
Alamosa.....	1,806	1,933
Arapahoe.....	7,485	9,057
Archuleta.....	427	602
Baca.....	941	1,528
Bent.....	1,456	1,556
Boulder.....	7,442	10,054
Chaffee.....	1,731	1,675
Cheyenne.....	594	923
Clear Creek.....	636	795
Conejos.....	2,028	1,740
Costilla.....	1,515	896
Crowley.....	710	1,214
Custer.....	333	601
Delta.....	2,351	3,462
Denver.....	90,001	86,331
Dolores.....	300	429
Douglas.....	638	1,214
Eagle.....	952	922
Elbert.....	628	1,413
El Paso.....	11,679	16,392
Fremont.....	3,180	4,953
Garfield.....	1,865	2,588
Gipin.....	213	272
Grand.....	554	968
Gunnison.....	1,411	1,221
Hinsdale.....	61	124
Huerfano.....	3,290	2,119
Jackson.....	252	463
Jefferson.....	7,277	9,815
Kiowa.....	522	970
Kit Carson.....	937	2,471
Lake.....	1,687	1,236
La Plata.....	2,031	3,023
Larimer.....	5,172	9,914
Las Animas.....	6,800	4,179
Lincoln.....	1,147	1,689
Logan.....	2,471	3,998
Mesa.....	6,870	6,653
Mineral.....	150	170
Moffat.....	923	1,445
Montezuma.....	1,207	1,610
Montrose.....	2,258	2,952
Morgan.....	1,839	4,166
Otero.....	3,791	5,002
Ouray.....	303	503
Park.....	426	670
Phillips.....	761	1,455
Pitkin.....	355	368
Prowers.....	1,948	2,796
Pueblo.....	19,039	13,848
Rio Blanco.....	451	881
Rio Grande.....	1,325	2,567
Routt.....	1,940	1,869
Saguache.....	729	1,204
San Juan.....	258	328
San Miguel.....	630	536
Sedgwick.....	568	1,228
Summit.....	237	326
Teller.....	808	829
Washington.....	1,058	2,259
Weld.....	8,459	14,546
Yuma.....	1,374	2,847
Totals.....	234,331	268,731

Other party votes 1944: Socialist 1,977; total state vote 1944: 505,039.

CONNECTICUT

County	1944	
	Dem.	Rep.
Fairfield.....	99,181	103,692
Hartford.....	127,841	95,224
Litchfield.....	19,212	24,019
Middlesex.....	13,551	14,315
New Haven.....	123,450	108,883
New London.....	29,304	24,151
Tolland.....	7,721	8,203
Windham.....	14,886	12,032
Totals.....	435,146	390,527

Other party votes 1944: Socialist 5,097; Socialist Labor 1,220; total state vote 1944: 831,990.

DELAWARE

County	1944	
	Dem.	Rep.
Kent.....	7,900	7,066
New Castle.....	49,588	37,783
Sussex.....	10,678	11,895
Totals.....	68,166	56,747

Other party votes 1944: Prohibition 294; Socialist 154; total state vote 1944: 125,361.

FLORIDA

County	1944	
	Dem.	Rep.
Alachua.....	5,755	1,690
Baker.....	1,137	127
Bay.....	6,317	1,126
Bradford.....	1,775	355
Brevard.....	2,651	1,769
Broward.....	6,183	5,583
Calhoun.....	1,504	207
Charlotte.....	789	404
Citrus.....	1,328	264
Clay.....	1,251	520
Collier.....	640	180
Columbia.....	2,467	537
Dade.....	60,100	30,357
De Soto.....	1,722	543
Dixie.....	1,104	84
Duval.....	36,867	12,220
Escambia.....	16,240	3,191
Flagler.....	401	114
Franklin.....	1,176	102
Gadsden.....	2,574	462
Gilchrist.....	862	81
Glades.....	373	164
Gulf.....	1,267	83
Hamilton.....	1,200	262
Hardee.....	2,156	708
Hendry.....	933	347
Hernando.....	1,002	346
Highlands.....	2,113	874
Hillsborough.....	31,146	10,252
Holmes.....	2,652	908
Indian River.....	1,292	755
Jackson.....	4,633	951

FLORIDA (cont.)

County	1944	
	Dem.	Rep.
Alachua	1,071	188
Bay	825	140
Calhoun	4,323	2,693
Charlotte	3,353	1,865
Clay	4,505	835
Columbia	2,107	225
DeKalb	626	38
Duval	1,914	293
Escambia	4,544	2,218
Franklin	5,597	1,642
Gadsden	960	530
Hamilton	3,882	566
Hernando	1,892	527
Jefferson	2,877	626
Lake	753	119
Levy	12,008	8,826
Liberty	1,763	1,400
Madison	11,093	7,628
Manatee	2,523	1,352
Marion	19,574	14,340
Meade	13,152	5,150
Monroe	2,926	1,163
Murphy	3,764	1,582
Nassau	2,129	920
Neuse	2,607	862
Onslow	3,443	2,109
Ocean	2,940	1,352
Oklawaha	1,838	276
Orange	2,526	483
Osceola	1,828	165
Palm Beach	905	102
Palm Bay	8,233	6,161
Palm Bay	1,018	73
Palm Bay	2,569	689
Palm Bay	1,699	507
Palm Bay	339,377	143,215

GEORGIA

County	1944	
	Dem.	Rep.
Adams	1,318	383
Albany	766	90
Albermarle	763	213
Anderson	478	24
Appling	1,307	283
Archibald	490	125
Bartholomew	1,513	257
Bartow	1,915	504
Bassett	1,046	163
Bell	1,481	215
Benton	5,352	1,354
Berkeley	815	189
Bibb	540	122
Bolton	1,381	226
Boswell	688	85
Bowling	1,921	253
Bradford	909	135
Brazos	1,330	62
Brown	736	28
Buck	556	74
Bull	653	132
Burnett	3,331	704
Butler	1,453	392
Calhoun	462	85
Camden	8,725	1,918

GEORGIA (cont.)

County	1944	
	Dem.	Rep.
Chattahoochee	100	16
Chattahoochee	2,495	281
Cherokee	1,348	1,059
Clarke	3,112	264
Clay	442	33
Clayton	1,828	243
Clinch	582	60
Cobb	5,000	1,339
Coffee	1,625	349
Colquitt	2,308	681
Columbia	508	69
Cook	1,155	197
Coweta	2,649	127
Crawford	375	108
Crisp	1,199	212
Dade	943	169
Dawson	469	342
Decatur	1,606	260
DeKalb	12,069	2,484
Dodge	1,437	191
Dooly	845	64
Dougherty	3,199	338
Douglas	828	277
Early	1,753	66
Echols	466	14
Effingham	433	333
Elbert	1,564	357
Emanuel	1,635	296
Evans	756	113
Fannin	1,298	1,980
Fayette	782	95
Floyd	4,764	1,086
Forsyth	1,047	695
Franklin	1,377	324
Fulton	37,161	7,119
Gilmer	884	787
Glascok	318	157
Glynn	1,995	372
Gordon	1,457	605
Grady	1,661	212
Greene	1,246	136
Gwinnett	3,339	699
Habersham	1,842	494
Hall	3,066	789
Hancock	380	92
Haralson	1,248	911
Harris	893	76
Hart	1,161	179
Heard	557	183
Henry	1,461	122
Houston	535	161
Irwin	862	249
Jackson	1,754	218
Jasper	777	73
Jeff Davis	737	117
Jefferson	1,043	266
Jenkins	698	97
Johnson	978	288
Jones	661	153
Lamar	1,015	133
Laurens	2,544	452
Lee	447	21
Liberty	481	122
Lincoln	444	133
Long	318	101
Lowndes	2,092	381
Lumpkin	896	211
McDuffie	795	181
McIntosh	406	134

GEORGIA (cont.)

County	1944	
	Dem.	Rep.
Macon	889	155
Madison	1,235	261
Marion	501	66
Meriwether	2,187	181
Miller	809	54
Mitchell	2,179	223
Monroe	1,132	326
Montgomery	575	90
Morgan	1,166	51
Murray	1,375	668
Muscogee	6,498	1,296
Newton	2,022	116
Oconee	570	194
Oglethorpe	922	171
Paulding	1,355	770
Peach	919	196
Pickens	780	789
Pierce	1,069	152
Pike	742	118
Polk	2,698	459
Pulaski	592	46
Putnam	701	60
Quitman	355	13
Rabun	1,247	183
Randolph	1,159	106
Richmond	6,918	1,124
Rockdale	946	94
Schley	329	33
Screven	895	186
Seminole	1,076	83
Spaulding	2,805	198
Stephens	1,158	203
Stewart	597	72
Sumter	1,550	161
Talbot	832	42
Taliaferro	389	6
Tattnall	1,215	488
Taylor	773	241
Telfair	1,187	142
Terrell	1,639	36
Thomas	1,747	408
Tift	1,630	380
Toombs	1,825	237
Towns	1,137	673
Treutlen	893	34
Troup	3,233	334
Turner	797	325
Twiggs	457	141
Union	1,288	760
Upson	2,362	203
Walker	2,753	757
Walton	2,046	142
Ware	2,306	423
Warren	449	144
Washington	1,094	284
Wayne	978	229
Webster	284	65
Wheeler	517	148
White	706	157
Whitfield	2,827	1,023
Wilcox	1,364	184
Wilkes	946	157
Wilkinson	763	242
Worth	1,096	203
Totals	268,187	56,506

Other party votes 1944; Independent Democrats 3,373; Scattering 9; Prohibition 36; total state vote 1944; 328,111.

IDAHO

County	1944	
	Dem.	Rep.
Ada.....	10,667	13,410
Adams.....	721	642
Bannock.....	9,681	5,413
Bear Lake.....	1,732	1,613
Benewah.....	1,446	1,173
Bingham.....	3,428	3,223
Blaine.....	1,037	874
Boise.....	564	464
Bonner.....	3,116	2,924
Bonneville.....	4,935	4,048
Boundary.....	1,053	1,064
Butte.....	416	431
Camas.....	317	301
Canyon.....	7,306	9,215
Caribou.....	516	462
Cassia.....	2,325	2,563
Clark.....	180	317
Clearwater.....	1,744	865
Custer.....	613	565
Elmore.....	1,627	1,030
Franklin.....	1,971	1,950
Fremont.....	2,116	1,755
Gem.....	1,866	1,363
Gooding.....	1,659	2,049
Idaho.....	2,071	1,977
Jefferson.....	2,198	1,458
Jerome.....	1,741	2,157
Kootenai.....	5,792	4,388
Latah.....	3,514	3,526
Lemhi.....	988	1,048
Lewis.....	1,222	589
Lincoln.....	784	934
Madison.....	1,927	1,527
Minidoka.....	1,635	1,781
Nez Perce.....	5,453	3,159
Oneida.....	1,227	935
Owyhee.....	824	983
Payette.....	1,382	2,485
Power.....	801	895
Shoshone.....	5,290	3,162
Teton.....	641	552
Twin Falls.....	6,128	7,946
Valley.....	896	919
Washington.....	1,849	2,002
Totals.....	107,399	100,137

Other party votes 1944: Prohibition 503; Socialist 282; total state vote 1944: 208,321.

ILLINOIS

County	1944	
	Dem.	Rep.
Adams.....	13,733	15,564
Alexander.....	4,767	4,792
Bond.....	2,607	3,907
Boone.....	2,074	5,708
Brown.....	1,849	1,738
Bureau.....	6,976	11,802
Calhoun.....	1,271	1,956
Carroll.....	2,843	6,101
Cass.....	3,909	3,641
Champaign.....	13,842	18,935
Christian.....	9,360	8,995

ILLINOIS (cont.)

County	1944	
	Dem.	Rep.
Clark.....	3,619	5,373
Clay.....	3,531	4,484
Clinton.....	3,944	6,753
Coles.....	8,936	9,473
Cook (see total)		
Crawford.....	4,482	6,056
Cumberland.....	2,391	2,700
DeKalb.....	6,004	12,157
DeWitt.....	3,658	4,630
Douglas.....	3,323	4,684
DuPage.....	18,711	41,890
Edgar.....	5,054	6,961
Edwards.....	1,197	3,016
Effingham.....	4,587	5,441
Fayette.....	5,435	6,332
Ford.....	2,270	5,317
Franklin.....	11,663	11,377
Fulton.....	8,946	11,117
Gallatin.....	2,175	2,073
Greene.....	4,268	4,261
Grundy.....	3,544	6,310
Hamilton.....	2,914	3,582
Hancock.....	5,338	7,972
Hardin.....	1,370	2,037
Henderson.....	1,550	2,695
Henry.....	9,130	13,539
Inquois.....	5,168	10,389
Jackson.....	6,735	10,002
Jasper.....	3,142	3,453
Jefferson.....	8,496	7,916
Jersey.....	2,910	3,546
JoDaviss.....	3,298	6,465
Johnson.....	1,522	3,298
Kane.....	23,362	38,698
Kankakee.....	11,342	15,256
Kendall.....	1,673	4,022
Knox.....	10,070	15,964
Lake.....	25,453	35,674
La Salle.....	21,489	28,179
Lawrence.....	4,003	5,191
Lee.....	4,899	10,397
Livingston.....	6,231	12,436
Logan.....	4,868	7,955
McDonough.....	4,497	9,028
McHenry.....	5,567	15,666
McLean.....	14,011	19,366
Macon.....	22,808	19,608
Macoupin.....	11,951	11,572
Madison.....	40,114	28,399
Marion.....	10,079	9,408
Marshall.....	2,596	4,195
Mason.....	3,282	3,959
Massac.....	1,758	3,814
Menard.....	1,888	3,013
Mercer.....	3,277	5,667
Monroe.....	2,068	4,032
Montgomery.....	7,855	8,989
Morgan.....	6,965	8,923
Moultrie.....	2,853	3,180
Ogle.....	3,951	10,680
Peoria.....	32,837	34,171
Perry.....	4,677	6,236
Piatt.....	2,641	3,912
Pike.....	5,833	5,633
Pope.....	813	2,305
Pulaski.....	2,311	3,248
Putnam.....	865	1,521
Randolph.....	6,199	7,518
Richland.....	2,858	4,577

ILLINOIS (cont.)

County	1944	
	Dem.	Rep.
Rock Island.....	30,102	23,981
St. Clair.....	48,325	33,561
Saline.....	7,351	9,011
Sangamon.....	28,713	32,881
Schuyler.....	2,555	2,811
Scott.....	1,864	2,111
Shelby.....	5,919	6,111
Stark.....	1,401	3,311
Stephenson.....	7,755	11,911
Tazewell.....	14,412	12,511
Union.....	4,367	4,111
Vermilion.....	18,387	20,711
Wabash.....	3,026	3,411
Warren.....	3,926	7,011
Washington.....	2,723	5,411
Wayne.....	4,019	5,611
White.....	4,822	5,111
Whiteside.....	5,555	14,111
Will.....	27,085	30,011
Williamson.....	9,974	12,511
Winnebago.....	27,831	30,811
Woodford.....	3,514	6,211
Total Down State.....	804,112	1,014,611
Cook County.....	1,275,367	924,611
Total Illinois.....	2,079,479	1,939,311

Other party votes 1944: Socialist 180; Socialist Labor 9,877; Prohibition 7,411; total state vote 1944: 4,036,061.

INDIANA

County	1944	
	Dem.	Rep.
Adams.....	3,804	5,611
Allen.....	30,445	41,911
Bartholomew.....	7,139	7,611
Benton.....	2,065	3,611
Blackford.....	3,207	3,011
Boone.....	5,292	6,811
Brown.....	1,352	1,111
Carroll.....	3,578	4,811
Cass.....	8,615	9,711
Clark.....	9,778	7,211
Clay.....	5,721	6,611
Clinton.....	6,381	8,011
Crawford.....	2,335	2,411
Daviess.....	5,523	7,411
Dearborn.....	5,157	5,411
Decatur.....	3,471	5,411
DeKalb.....	4,810	7,411
Delaware.....	18,780	17,311
Dubois.....	5,273	4,811
Elkhart.....	12,991	20,611
Fayette.....	5,299	5,611
Floyd.....	10,541	8,411
Fountain.....	4,022	5,511
Franklin.....	2,530	3,711
Fulton.....	3,201	5,111
Gibson.....	7,462	7,811
Grant.....	11,031	14,511
Greene.....	6,744	8,211
Hamilton.....	4,101	8,211
Hancock.....	4,652	5,111
Harrison.....	4,285	4,311

INDIANA (cont.)

County	1944	
	Dem.	Rep.
Adams	4,297	6,673
Allen	8,297	10,583
Anderson	11,224	11,515
Armstrong	6,128	8,668
Bartholomew	5,982	6,321
Bates	2,168	4,364
Benton	5,166	6,207
Berkeley	4,376	5,748
Bloomington	2,537	3,643
Bourbon	5,426	6,194
Brown	10,297	10,023
Buchanan	4,865	9,577
Butler	1,539	3,501
Calhoun	75,066	48,147
Cass	13,896	16,543
Cayuga	5,246	9,200
Champaign	24,488	21,381
Chickasaw	106,382	116,421
Chickasha	5,254	8,225
Clinton	2,515	2,467
Columbia	6,379	8,207
Connersville	6,809	8,993
Crawford	5,620	8,319
Crawfordsville	4,156	6,115
Crown Point	1,583	3,398
Decatur	4,174	7,200
DeKalb	1,043	1,126
Delaware	3,130	4,784
DeWitt	2,602	3,318
Dickinson	3,241	4,751
Dubois	3,996	4,087
Dubuque	3,513	4,267
Elkhart	5,528	8,561
Ellettsburg	4,183	4,374
Ellettsville	2,509	3,206
Evansville	4,857	5,386
Franklin	4,590	7,805
Fayette	3,835	5,642
Floyd	3,891	5,853
Franklin	47,149	39,875
Greene	2,621	2,379
Hamilton	6,798	6,816
Hancock	3,647	4,986
Harrison	2,791	3,574
Heard	1,837	4,739
Hendricks	6,420	5,855
Henry	2,191	2,019
Hickman	10,229	15,888
Hicksville	3,427	4,296
Holmes	1,154	1,998
Holmesburg	34,440	30,684
Holmesville	4,912	4,998
Holmesville	24,649	21,493
Holmesville	4,665	8,357
Holmesville	1,555	2,870
Holmesville	4,049	5,042
Holmesville	3,940	4,033
Holmesville	12,432	15,295
Holmesville	4,475	4,708
Holmesville	3,570	5,039
Holmesville	4,079	5,268
Holmesville	781,403	875,891

Other party votes 1944: Socialist 12,574; total vote 1944: 1,672,091.

IOWA

County	1944	
	Dem.	Rep.
Adair	2,297	3,428
Adams	1,868	2,540
Allamakee	2,893	5,017
Appanoose	5,015	4,928
Audubon	3,094	2,346
Benton	4,619	4,378
Black Hawk	16,593	15,678
Boone	6,062	4,868
Bremer	2,764	4,861
Buchanan	3,841	4,653
Buena Vista	4,277	3,993
Butler	2,225	4,182
Calhoun	3,544	3,375
Carroll	4,799	4,833
Cass	2,928	5,610
Cedar	2,610	4,673
Cerro Gordo	9,088	8,311
Cherokee	3,197	3,723
Chickasaw	3,328	3,575
Clarke	1,946	2,603
Clay	3,639	3,055
Clayton	4,259	5,855
Clinton	8,028	11,533
Crawford	3,218	4,242
Dallas	5,316	5,413
Davis	2,727	2,559
Decatur	3,316	2,934
Delaware	2,498	5,164
Des Moines	7,543	9,488
Dickinson	2,473	2,133
Dubuque	12,867	12,502
Emmet	2,577	2,668
Fayette	5,105	6,693
Floyd	3,446	5,248
Franklin	2,851	3,150
Fremont	2,747	3,113
Greene	2,797	3,437
Grundy	2,191	3,625
Guthrie	2,899	4,042
Hamilton	4,302	3,837
Hancock	2,855	3,114
Hardin	3,975	5,059
Harrison	4,201	5,059
Henry	2,741	5,208
Howard	3,132	2,961
Humboldt	2,749	2,525
Ida	1,943	2,640
Iowa	3,119	3,959
Jackson	3,537	4,341
Jasper	6,978	6,413
Jefferson	2,926	4,335
Johnson	8,434	6,396
Jones	3,563	4,453
Keokuk	3,900	4,644
Kossuth	5,488	4,918
Lee	8,252	9,406
Linn	21,123	21,293
Louisa	1,894	2,745
Lucas	2,526	3,139
Lyon	1,970	3,065
Madison	2,550	3,737
Mahaska	4,652	5,123
Marion	6,365	4,874
Marshall	5,598	7,325
Mills	2,106	3,288
Mitchell	2,696	3,406
Monona	3,761	3,583

IOWA (cont.)

County	1944	
	Dem.	Rep.
Monroe	3,258	2,625
Montgomery	2,572	4,165
Muscatine	4,801	7,104
O'Brien	3,138	4,033
Osceola	1,698	2,100
Page	3,297	6,300
Palo Alto	3,726	2,772
Plymouth	2,970	6,085
Pocahontas	3,577	2,600
Polk	46,072	36,629
Pottawattamie	11,752	14,007
Poweshiek	4,234	4,186
Ringgold	1,867	2,767
Sac	3,223	3,770
Scott	18,962	18,015
Shelby	2,978	3,873
Sioux	3,369	6,552
Story	6,554	7,163
Tama	5,286	5,249
Taylor	2,376	3,804
Union	2,861	4,566
Van Buren	1,997	3,095
Wapello	10,732	8,244
Warren	3,319	4,266
Washington	3,423	5,308
Wayne	3,025	3,098
Webster	9,477	6,935
Winnebago	2,654	2,808
Winnesiek	4,557	5,318
Woodbury	20,448	18,544
Worth	2,629	2,086
Wright	4,232	3,916
Totals	499,876	547,267

Other party votes 1944: Prohibition 3,752; Socialist 1,511; Socialist Labor 193; total state vote 1944: 1,052,699.

KANSAS

County	1944	
	Dem.	Rep.
Allen	2,262	5,032
Anderson	1,649	3,060
Atchison	3,325	4,731
Barber	1,501	2,140
Barton	3,761	5,547
Bourbon	3,622	4,790
Brown	1,817	4,947
Butler	6,084	7,064
Chase	998	1,510
Chautauqua	1,106	2,305
Cherokee	4,468	5,458
Cherokee	736	1,610
Clark	741	950
Clay	1,391	4,101
Cloud	2,391	4,377
Coffey	1,660	3,461
Comanche	742	1,048
Cowley	6,577	8,453
Crawford	8,211	9,017
Decatur	1,159	1,758
Dickinson	3,190	6,227
Doniphan	1,261	3,236

KANSAS (cont.)

County	1944	
	Dem.	Rep.
Douglas.....	3,886	8,224
Edwards.....	876	1,669
Elk.....	954	2,283
Ellis.....	2,218	3,369
Ellsworth.....	1,678	2,290
Finney.....	1,667	2,366
Ford.....	2,994	4,110
Franklin.....	2,880	5,375
Geary.....	2,107	2,833
Gove.....	420	1,125
Graham.....	814	1,651
Grant.....	282	566
Gray.....	775	1,057
Greeley.....	215	378
Greenwood.....	2,187	3,959
Hamilton.....	471	795
Harper.....	1,573	2,849
Harvey.....	3,300	5,339
Haskell.....	342	520
Hodgeman.....	490	982
Jackson.....	1,567	3,665
Jefferson.....	1,575	3,504
Jewell.....	1,216	3,754
Johnson.....	5,771	11,951
Kearny.....	365	612
Kingman.....	1,579	2,827
Kiowa.....	618	1,479
Labette.....	5,398	7,480
Lane.....	388	773
Leavenworth.....	5,097	7,282
Lincoln.....	910	2,405
Linn.....	1,442	3,185
Logan.....	406	1,107
Lyon.....	4,984	5,710
McPherson.....	3,321	5,840
Marion.....	1,925	5,219
Marshall.....	2,681	6,184
Meade.....	631	1,424
Miami.....	3,217	4,326
Mitchell.....	1,579	3,238
Montgomery.....	7,063	11,738
Morris.....	1,584	2,628
Morton.....	367	617
Nemaha.....	2,149	4,277
Neosho.....	3,233	5,420
Ness.....	876	1,745
Norton.....	1,159	2,890
Osage.....	2,212	4,107
Osborne.....	1,078	2,827
Ottawa.....	1,378	2,428
Pawnee.....	1,727	2,057
Phillips.....	1,098	3,053
Pottawatomie.....	1,727	4,074
Pratt.....	2,334	2,658
Rawlins.....	955	1,569
Reno.....	7,604	11,004
Republic.....	1,891	3,802
Rice.....	2,505	4,024
Riley.....	2,659	6,511
Rooks.....	1,166	2,361
Rush.....	1,076	2,193
Russell.....	1,583	3,344
Saline.....	5,097	7,571
Scott.....	565	903
Sedgwick.....	34,442	38,896
Seward.....	1,342	1,590
Shawnee.....	14,678	21,396
Sheridan.....	658	1,342
Sherman.....	1,021	1,608

KANSAS (cont.)

County	1944	
	Dem.	Rep.
Smith.....	1,377	3,282
Stafford.....	1,908	2,493
Stanton.....	240	398
Stevens.....	414	760
Sumner.....	4,187	6,343
Thomas.....	1,097	1,631
Trego.....	883	1,459
Wabaunsee.....	873	2,839
Wallace.....	292	720
Washington.....	1,455	5,040
Wichita.....	329	608
Wilson.....	1,912	4,244
Woodson.....	999	2,308
Wyandotte.....	32,914	26,817
Totals.....	287,458	442,096

Other party votes 1944: Socialist 1,613; Prohibition 2,609; total state vote 1944: 733,776.

KENTUCKY

County	1944	
	Dem.	Rep.
Adair.....	2,411	3,414
Allen.....	1,742	3,120
Anderson.....	2,148	1,409
Ballard.....	2,845	637
Barren.....	4,439	3,262
Bath.....	2,184	1,581
Bell.....	4,616	4,822
Boone.....	2,451	1,457
Bourbon.....	3,828	1,957
Boyd.....	8,130	6,868
Boyle.....	3,490	2,195
Bracken.....	1,915	1,483
Breathitt.....	2,922	1,230
Breckinridge.....	2,889	3,292
Bullitt.....	2,092	876
Butler.....	1,153	3,354
Caldwell.....	2,444	2,242
Calloway.....	4,888	1,121
Campbell.....	12,959	13,647
Carlisle.....	2,057	505
Carroll.....	2,662	755
Carter.....	2,733	4,117
Casey.....	1,520	3,869
Christian.....	6,260	4,506
Clark.....	3,608	1,929
Clay.....	1,185	4,307
Clinton.....	564	2,618
Crittenden.....	1,544	2,690
Cumberland.....	717	2,619
Daviess.....	8,143	6,135
Edmonson.....	1,016	2,433
Elliott.....	1,721	514
Estill.....	2,000	2,493
Fayette.....	13,567	10,857
Fleming.....	2,612	2,666
Floyd.....	7,729	3,197
Franklin.....	6,356	2,050
Fulton.....	2,973	654
Gallatin.....	1,360	516
Garrard.....	1,764	2,042
Grant.....	2,413	1,621
Graves.....	8,057	2,172

KENTUCKY (cont.)

County	1944	
	Dem.	Rep.
Grayson.....	2,436	3,621
Green.....	1,809	2,371
Greenup.....	3,821	3,711
Hancock.....	1,129	1,361
Hardin.....	4,436	2,831
Harlan.....	8,000	5,811
Harrison.....	3,706	1,461
Hart.....	3,138	3,011
Henderson.....	5,887	2,681
Henry.....	3,548	1,491
Hickman.....	2,005	581
Hopkins.....	7,352	3,791
Jackson.....	328	3,571
Jefferson.....	80,236	60,901
Jessamine.....	2,426	1,791
Johnson.....	2,222	4,641
Kenton.....	17,524	12,651
Knott.....	3,867	801
Knox.....	2,385	5,171
Larue.....	2,065	1,551
Laurel.....	2,104	5,051
Lawrence.....	2,408	2,711
Lee.....	1,072	1,461
Leslie.....	499	2,671
Letcher.....	4,599	4,051
Lewis.....	1,434	3,271
Lincoln.....	3,087	2,791
Livingston.....	1,686	1,201
Logan.....	5,110	2,211
Lyon.....	1,743	921
McCracken.....	10,846	4,191
McCreary.....	880	3,311
McLean.....	2,222	1,751
Madison.....	5,769	5,461
Magoffin.....	2,031	2,131
Marion.....	2,996	1,671
Marshall.....	2,947	1,311
Martin.....	571	2,061
Mason.....	3,810	3,251
Meade.....	1,828	1,041
Menifee.....	976	561
Mercer.....	3,086	2,031
Metcalfe.....	1,694	2,301
Monroe.....	1,101	3,641
Montgomery.....	2,334	1,481
Morgan.....	3,242	1,211
Muhlenberg.....	3,657	4,611
Nelson.....	3,648	2,131
Nicholas.....	1,813	1,051
Ohio.....	3,131	4,491
Oldham.....	1,908	1,021
Owen.....	3,157	621
Owsley.....	325	2,031
Pendleton.....	2,096	1,971
Perry.....	5,527	4,331
Pike.....	9,757	8,091
Powell.....	1,023	901
Pulaski.....	3,934	8,311
Robertson.....	855	551
Rockcastle.....	1,327	3,801
Rowan.....	1,944	1,811
Russell.....	1,185	3,011
Scott.....	3,627	1,581
Shelby.....	4,415	1,951
Simpson.....	2,821	1,011
Spencer.....	1,443	601
Taylor.....	2,475	2,611
Todd.....	2,990	1,301

KENTUCKY (cont.)

County	1944	
	Dem.	Rep.
Adair	2,511	1,332
Boyle	1,916	264
Bourbon	3,489	935
Breathitt	7,528	4,944
Buchanan	2,283	2,353
Bullitt	2,022	3,048
Burns	3,324	1,840
Calloway	2,352	6,378
Carter	1,450	889
Cass	2,154	1,374
Totals	472,589	392,448

Other party votes 1944: Prohibition 2,023; Socialist 535; Socialist Labor 326; total state vote 1944: 867,921.

LOUISIANA

County	1944	
	Dem.	Rep.
Acadia	4,439	1,023
Akron	2,205	336
Ascension	2,291	364
Assumption	1,419	426
Audouville	3,789	306
Auregard	2,226	759
Avery	1,801	705
Bossier	2,430	622
Bossier	12,896	5,885
Cadieux	7,861	1,867
Caldwell	1,142	505
Cameron	1,025	86
Cahoula	1,208	291
Caldwell	2,266	578
Caldwell	974	201
Caldwell	1,858	538
West Baton Rouge	14,757	3,025
West Carroll	925	357
West Feliciana	869	220
Angeline	3,029	275
Franklin	2,476	597
Went	1,939	556
Went	3,661	1,141
Went	2,265	432
Went	1,840	414
Went	10,268	1,782
Went Davis	2,329	1,156
Went	4,801	742
Went	4,980	875
Went	2,018	504
Went	1,705	1,032
Went	2,460	343
Went	764	338
Went	1,859	478
Went	2,536	1,105
Went	90,411	20,190
Went	6,329	2,627
Went	1,755	335
Went	1,436	271
Went	9,132	1,712
Went	975	409
Went	2,087	488
Went	2,048	1,039
Went	2,044	80
Went	1,945	174
Went	683	108
Went	1,387	265

LOUISIANA (cont.)

County	1944	
	Dem.	Rep.
St. John	1,324	195
St. Landry	4,423	784
St. Martin	2,384	153
St. Mary	3,591	538
St. Tammany	3,450	703
Tangipahoa	4,419	1,572
Tensas	638	160
Terrebonne	3,539	550
Union	1,765	803
Vermilion	4,684	676
Vernon	3,075	1,022
Washington	4,810	406
Webster	3,655	899
West Baton Rouge	1,045	87
West Carroll	1,390	581
West Feliciana	426	178
Winn	1,403	881
Totals	281,564	67,750

Other party votes 1944: Independent 69; total state vote 1944: 349,383.

MAINE

County	1944	
	Dem.	Rep.
Androscoggin	19,078	10,927
Aroostook	8,017	11,678
Cumberland	26,857	29,349
Franklin	2,646	4,127
Hancock	3,241	7,143
Kennebec	14,070	14,335
Knox	3,758	5,590
Lincoln	2,102	4,919
Oxford	6,377	8,053
Penobscot	13,292	16,934
Piscataquis	2,957	3,536
Sagadahoc	4,003	3,883
Somerset	5,331	7,167
Waldo	1,807	4,291
Washington	5,709	5,380
York	21,386	18,122
Totals	140,631	155,434

Other party votes 1944: Socialist Labor 335; total state vote 1944: 296,400.

MARYLAND

County	1944	
	Dem.	Rep.
Allegany	15,345	15,589
Anne Arundel	10,269	10,860
Baltimore	26,275	34,047
Calvert	1,549	2,184
Caroline	2,060	3,073
Carroll	4,483	8,999
Cecil	4,662	3,680
Charles	1,875	2,755
Dorchester	4,764	4,241
Frederick	8,528	11,367
Garrett	1,961	4,162

MARYLAND (cont.)

County	1944	
	Dem.	Rep.
Hartford	4,839	6,751
Howard	3,140	3,344
Kent	2,454	2,351
Montgomery	15,324	20,400
Prince George's	14,006	13,750
Queen Anne's	3,027	2,119
St. Mary's	1,891	2,673
Somerset	3,125	3,790
Talbot	2,768	3,712
Washington	11,365	12,227
Wicomico	5,674	5,040
Worcester	2,613	3,018
Baltimore City	163,493	112,817
Totals	315,490	292,949

MASSACHUSETTS

County	1944	
	Dem.	Rep.
Barnstable	4,938	11,543
Berkshire	31,212	24,830
Bristol	90,529	60,880
Dukes	861	1,372
Essex	118,228	111,958
Franklin	9,400	13,252
Hampden	91,819	63,293
Hampshire	17,676	14,907
Middlesex	210,253	236,102
Nantucket	569	779
Norfolk	69,606	97,490
Plymouth	32,290	47,245
Suffolk	234,475	139,285
Worcester	123,440	98,414
Totals	1,035,296	921,350

Other party votes 1944: Socialist Labor 2,780; Prohibition 973; all others 49,594; total state vote 1944: 2,009,993.

MICHIGAN

County	1944	
	Dem.	Rep.
Alcona	716	1,503
Alger	2,519	1,504
Allegan	4,480	12,327
Alpena	2,856	4,453
Antrim	1,206	2,626
Arenac	1,280	1,978
Baraga	1,874	1,829
Barry	3,010	7,057
Bay	15,602	15,459
Benzie	1,084	2,026
Berrien	15,886	24,832
Branch	3,406	7,155
Calhoun	16,611	20,664
Cass	3,417	6,566
Charlevoix	1,893	3,039
Cheboygan	2,141	2,943
Chippewa	4,344	5,335
Clare	1,078	2,636
Clinton	2,533	8,422
Crawford	550	797

MICHIGAN (cont.)

County	1944	
	Dem.	Rep.
Delta.....	7,375	5,213
Dickinson.....	6,740	4,987
Eaton.....	5,049	9,975
Emmet.....	2,206	3,538
Genesee.....	52,444	41,145
Gladwin.....	985	2,457
Gogebic.....	7,938	5,283
Grand Traverse.....	2,607	5,413
Griatiot.....	3,160	7,987
Hillsdale.....	3,153	9,364
Houghton.....	10,066	9,110
Huron.....	2,301	9,538
Ingham.....	23,655	34,255
Ionia.....	4,437	9,331
Iosco.....	1,127	2,340
Iron.....	4,537	3,945
Isabella.....	2,522	6,356
Jackson.....	13,859	22,992
Kalamazoo.....	16,223	24,974
Kalkaska.....	409	992
Kent.....	43,679	54,163
Keweenaw.....	965	866
Lake.....	794	1,145
Lapeer.....	3,002	7,769
Leelanau.....	944	2,063
Lenawee.....	6,750	16,382
Livingston.....	2,910	7,417
Luce.....	790	1,195
Mackinac.....	1,488	2,268
Macomb.....	23,506	21,305
Manistee.....	3,398	4,095
Marquette.....	11,707	8,163
Mason.....	3,137	4,446
Mecosta.....	1,708	4,217
Menominee.....	4,632	4,869
Midland.....	3,569	6,850
Missaukee.....	759	1,979
Monroe.....	10,275	13,478
Montcalm.....	3,168	7,525
Montmorency.....	541	1,034
Muskegon.....	19,963	16,536
Newaygo.....	2,156	5,250
Oakland.....	55,272	59,627
Oceana.....	1,738	3,534
Ogemaw.....	1,006	2,339
Ontonagon.....	2,611	2,433
Osecola.....	1,338	3,787
Oscoda.....	332	615
Otsego.....	912	1,259
Ottawa.....	8,511	17,077
Presque Isle.....	2,092	2,209
Roscommon.....	484	1,292
Saginaw.....	20,383	27,289
St. Clair.....	11,813	19,175
St. Joseph.....	4,235	9,785
Sanilac.....	2,015	9,512
Schoolcraft.....	1,724	1,704
Shiawassee.....	5,292	11,601
Tuscola.....	2,938	9,789
Van Buren.....	5,002	10,951
Washtenaw.....	14,922	24,740
Wayne.....	554,670	316,270
Wexford.....	2,489	4,074
Totals.....	1,106,899	1,084,423

Other party votes 1944: Prohibition 6,503; Socialist Labor 1,284; Socialist 4,598; America First Party 1,530; Odd 6; total state vote 1944: 2,205,223.

MINNESOTA

County	1944	
	Dem.	Rep.
Aitkin.....	2,743	2,720
Anoka.....	5,431	3,958
Becker.....	4,889	3,803
Beltrami.....	5,490	2,705
Benton.....	2,258	2,988
Big Stone.....	2,120	1,608
Blue Earth.....	5,098	9,429
Brown.....	2,842	7,018
Carlton.....	6,153	2,653
Carver.....	1,565	5,823
Cass.....	3,377	3,135
Chippewa.....	3,264	2,967
Chisago.....	2,376	3,020
Clay.....	5,230	4,392
Clearwater.....	2,658	1,125
Cook.....	545	513
Cottonwood.....	2,354	3,916
Crow Wing.....	5,504	4,500
Dakota.....	8,562	7,731
Dodge.....	1,808	2,902
Douglas.....	3,681	4,140
Faribault.....	3,640	5,882
Fillmore.....	3,183	6,339
Freeborn.....	6,486	5,728
Goodhue.....	5,791	7,820
Grant.....	1,969	1,898
Hennepin.....	148,792	116,781
Houston.....	1,847	4,036
Hubbard.....	1,613	2,114
Isanti.....	2,225	2,205
Itasca.....	8,787	4,227
Jackson.....	3,417	2,789
Kanabec.....	1,776	1,913
Kandiyohi.....	6,482	3,784
Kittson.....	2,752	983
Koochiching.....	3,981	1,607
Lac qui Parle.....	2,779	3,104
Lake.....	2,401	792
Lake of the Woods.....	1,168	642
Le Sueur.....	3,358	4,560
Lincoln.....	2,302	1,600
Lyon.....	4,640	3,617
McLeod.....	2,557	5,756
Mahnomen.....	1,494	748
Marshall.....	3,808	2,029
Martin.....	4,443	5,182
Meeker.....	3,159	4,302
Mille Lacs.....	2,872	2,798
Morrison.....	3,920	5,035
Mower.....	7,190	6,588
Murray.....	2,495	2,585
Nicollet.....	2,321	4,345
Nobles.....	3,413	4,149
Norman.....	2,846	1,884
Olmsted.....	6,873	8,355
Otter Tail.....	5,823	12,351
Pennington.....	3,330	1,525
Pine.....	4,332	3,433
Pipestone.....	2,129	2,844
Polk.....	8,808	4,402
Pope.....	2,781	2,607
Ramsey.....	78,759	53,052
Red Lake.....	1,642	757
Redwood.....	2,886	5,428
Renville.....	3,747	5,160
Rice.....	4,470	6,824
Rock.....	1,649	2,584
Roseau.....	3,697	1,513

MINNESOTA (cont.)

County	1944	
	Dem.	Rep.
St. Louis.....	63,369	27,450
Scott.....	2,786	3,320
Sherburne.....	1,447	2,040
Sibley.....	1,683	4,311
Stearns.....	8,647	13,200
Steele.....	3,307	4,700
Stevens.....	1,693	2,300
Swift.....	3,310	2,500
Todd.....	3,803	5,630
Traverse.....	1,721	1,290
Wabasha.....	2,482	4,210
Wadena.....	1,868	2,650
Waseca.....	2,207	4,140
Washington.....	5,599	6,010
Watsonwan.....	2,324	3,140
Wilkin.....	1,819	1,940
Winona.....	6,117	8,290
Wright.....	3,678	6,960
Yellow Medicine.....	3,214	3,330
Totals.....	589,864	527,410

Other party votes 1944: Industrial Government 3,176; Socialist 5,073; total state vote 1944: 1,125,509.

MISSISSIPPI

County	1944	
	Dem.	Rep.
Adams.....	1,431	720
Alcorn.....	2,569	880
Amite.....	1,348	250
Attala.....	1,990	250
Benton.....	800	160
Bolivar.....	2,119	119
Calhoun.....	2,006	390
Carroll.....	1,360	210
Chickasaw.....	1,762	420
Choctaw.....	1,066	460
Claiborne.....	667	120
Clarke.....	1,605	580
Clay.....	956	480
Coahoma.....	2,234	400
Copiah.....	2,320	220
Covington.....	1,615	180
DeSoto.....	1,469	520
Forrest.....	3,394	610
Franklin.....	1,137	330
George.....	1,025	180
Greene.....	879	630
Grenada.....	1,239	140
Hancock.....	1,536	800
Harrison.....	5,458	260
Hinds.....	9,575	210
Holmes.....	1,796	210
Humphreys.....	1,103	210
Issaquena.....	206	210
Itawamba.....	1,287	900
Jackson.....	2,496	900
Jasper.....	1,610	110
Jefferson.....	681	330
Jefferson Davis.....	1,305	500
Jones.....	4,563	110
Kemper.....	1,309	200
Lafayette.....	2,041	200

MISSISSIPPI (cont.)

County	1944	
	Dem.	Rep.
Lamar.....	1,043	27
Lauderdale.....	5,653	168
Lawrence.....	1,456	30
Leake.....	2,736	8
Lee.....	3,279	52
Leflore.....	2,200	23
Lincoln.....	2,380	47
Lowndes.....	1,969	49
Madison.....	1,805	28
Marion.....	2,415	17
Marshall.....	1,349	23
Monroe.....	2,927	81
Montgomery.....	1,238	23
Neshoba.....	2,869	60
Newton.....	2,448	31
Noxubee.....	934	36
Okfuskeba.....	1,821	28
Panola.....	1,798	22
Pearl River.....	2,093	36
Perry.....	775	20
Pike.....	2,738	56
Pontotoc.....	1,647	43
Prentiss.....	1,585	58
Quitman.....	1,001	11
Rankin.....	2,331	32
Scott.....	2,105	28
Sharkey.....	666	5
Shimmon.....	2,403	25
Smith.....	2,432	31
Stone.....	972	32
Sunflower.....	2,546	32
Tallahatchie.....	2,377	28
Tate.....	1,405	12
Tippah.....	2,439	59
Tishomingo.....	1,366	171
Tunica.....	649	11
Union.....	2,054	73
Walthall.....	1,170	26
Warren.....	3,018	101
Washington.....	1,535	36
Wayne.....	1,362	16
Webster.....	1,468	43
Wilkinson.....	773	17
Winston.....	1,757	15
Woloshka.....	1,525	28
Wozoo.....	2,200	27
Totals.....	158,515	3,742

Other party votes 1944: Independent Democrat 9,964; Independent Republican 7,859; total state vote 1944: 180,080.

MISSOURI

County	1944	
	Dem.	Rep.
Air.....	3,606	4,909
Brew.....	2,254	3,734
Chisown.....	2,214	2,803
Brain.....	6,471	3,455
ry.....	4,029	5,796
ton.....	2,688	3,356
es.....	4,096	5,122
nton.....	1,108	3,294
linger.....	1,841	2,850

MISSOURI (cont.)

County	1944	
	Dem.	Rep.
Boone.....	9,704	4,195
Buchanan.....	20,091	15,113
Butler.....	4,219	6,375
Caldwell.....	2,001	3,384
Callaway.....	5,757	3,143
Camden.....	990	2,180
Cape Girardeau.....	6,845	8,339
Carroll.....	3,283	5,127
Carter.....	1,207	1,033
Cass.....	4,347	4,687
Cedar.....	1,478	3,576
Chariton.....	3,930	3,802
Christian.....	1,134	4,167
Clark.....	2,155	2,707
Clay.....	8,682	6,724
Clinton.....	3,079	2,912
Cole.....	7,139	7,364
Cooper.....	3,729	4,928
Crawford.....	2,177	3,077
Dade.....	1,462	3,316
Dallas.....	1,064	3,232
Daviess.....	2,567	3,597
DeKalb.....	1,961	2,658
Dent.....	2,699	2,456
Douglas.....	746	3,570
Dunklin.....	8,431	4,274
Franklin.....	5,958	9,325
Gasconade.....	994	5,007
Gentry.....	3,022	2,970
Greene.....	17,287	21,531
Grundy.....	2,997	4,158
Harrison.....	2,623	4,330
Henry.....	4,587	5,564
Hickory.....	560	2,171
Holt.....	1,785	3,152
Howard.....	3,958	1,951
Howell.....	3,020	5,151
Iron.....	2,205	1,649
Jackson.....	20,957	19,323
Jasper.....	13,111	17,301
Jefferson.....	7,953	6,758
Johnson.....	4,419	5,949
Kansas City.....	92,846	76,083
Knox.....	1,943	2,057
Laclede.....	3,011	4,670
Lafayette.....	5,603	7,951
Lawrence.....	3,859	6,836
Lewis.....	2,883	1,988
Lincoln.....	3,773	2,910
Linn.....	5,242	4,942
Livingston.....	3,887	4,697
McDonald.....	2,523	3,520
Macon.....	4,772	4,796
Madison.....	2,203	2,277
Maries.....	1,824	1,519
Marion.....	8,575	4,560
Mercer.....	1,035	2,249
Miller.....	2,229	3,609
Mississippi.....	4,182	1,944
Moniteau.....	2,327	3,237
Monroe.....	5,000	1,098
Montgomery.....	2,743	3,527
Morgan.....	1,735	2,896
New Madrid.....	7,626	4,108
Newton.....	5,146	6,985
Nodaway.....	5,407	5,766
Oregon.....	2,734	1,573
Osage.....	2,121	3,284
Ozark.....	628	2,707

MISSOURI (cont.)

County	1944	
	Dem.	Rep.
Pemiscot.....	7,380	4,333
Perry.....	2,014	4,207
Pettis.....	7,176	7,696
Phelps.....	4,256	3,180
Pike.....	4,659	3,351
Platte.....	3,741	2,344
Polk.....	2,527	5,040
Pulaski.....	3,048	2,345
Putnam.....	1,168	3,106
Ralls.....	2,799	1,164
Randolph.....	7,629	2,879
Ray.....	4,521	3,094
Reynolds.....	1,877	951
Ripley.....	1,923	1,841
St. Charles.....	4,880	7,050
St. Clair.....	2,119	3,306
St. Francois.....	6,745	7,320
Ste. Genevieve.....	1,878	2,214
St. Louis.....	57,780	64,131
St. Louis City.....	204,687	134,411
Saline.....	6,715	6,022
Schuyler.....	1,729	1,526
Scotland.....	2,158	2,058
Scott.....	7,132	3,995
Shannon.....	2,093	1,110
Shelby.....	3,435	1,934
Stoddard.....	5,982	5,079
Stone.....	737	3,080
Sullivan.....	3,328	3,611
Taney.....	936	2,499
Texas.....	4,011	3,916
Vernon.....	4,885	5,171
Warren.....	815	3,017
Washington.....	2,065	2,900
Wayne.....	2,169	2,171
Webster.....	2,785	4,281
Worth.....	1,437	1,444
Wright.....	2,116	4,413
Totals.....	807,804	761,524

Other party votes 1944: Socialist 1,751; Prohibition 1,475; Socialist Labor 220; total state vote 1944: 1,572,474.

MONTANA

County	1944	
	Dem.	Rep.
Beaverhead.....	1,263	1,556
Big Horn.....	1,289	1,394
Blaine.....	1,469	990
Broadwater.....	558	760
Carbon.....	2,073	2,126
Carter.....	610	507
Cascade.....	10,924	6,372
Chouteau.....	1,906	1,220
Custer.....	2,038	1,830
Daniels.....	824	680
Dawson.....	1,362	1,549
Deer Lodge.....	4,347	2,176
Fallon.....	494	870
Fergus.....	3,164	2,229
Flathead.....	3,608	4,066
Gallatin.....	3,479	3,120
Garfield.....	478	563

MONTANA (cont.)

County	1944	
	Dem.	Rep.
Glacier.....	2,142	1,228
Golden Valley...	266	395
Granite.....	574	702
Hill.....	2,986	1,646
Jefferson.....	803	797
Judith Basin.....	1,049	691
Lake.....	1,750	2,265
Lewis & Clark....	4,737	4,482
Liberty.....	440	393
Lincoln.....	1,445	1,109
McCone.....	763	526
Madison.....	1,022	1,278
Meagher.....	482	509
Mineral.....	401	380
Missoula.....	5,558	5,371
Musselshell.....	1,342	1,004
Park.....	2,245	2,396
Petroleum.....	225	253
Phillips.....	1,435	1,089
Pondera.....	1,448	890
Powder River.....	476	650
Powell.....	1,527	1,100
Prairie.....	468	598
Ravalli.....	1,926	2,342
Richland.....	1,777	1,347
Roosevelt.....	1,848	1,281
Rosebud.....	1,114	1,154
Sanders.....	1,184	1,070
Sheridan.....	1,713	791
Silver Bow.....	13,228	7,610
Stillwater.....	934	1,201
Sweet Grass.....	533	897
Teton.....	1,508	1,074
Toole.....	1,545	1,113
Treasure.....	282	287
Valley.....	2,196	1,341
Wheatland.....	733	767
Wibaux.....	425	432
Yellowstone.....	8,140	8,706
Totals.....	112,556	93,163

Other party votes 1944: Prohibition 340; Socialist 1,296; total state vote 1944: 207,354.

NEBRASKA

County	1944	
	Dem.	Rep.
Adams.....	4,612	7,165
Antelope.....	1,618	3,888
Arthur.....	153	263
Banner.....	154	378
Blaine.....	248	366
Boone.....	1,665	2,865
Box Butte.....	1,736	2,994
Boyd.....	895	1,456
Brown.....	745	1,549
Buffalo.....	3,852	6,073
Burt.....	2,162	3,189
Butler.....	2,922	2,493
Cass.....	3,144	4,588
Cedar.....	1,839	3,616
Chase.....	648	1,444
Cherry.....	1,371	2,314
Cheyenne.....	1,752	2,654

NEBRASKA (cont.)

County	1944	
	Dem.	Rep.
Clay.....	1,530	3,375
Colfax.....	2,178	2,314
Cuming.....	1,401	4,008
Custer.....	3,321	5,330
Dakota.....	1,989	1,703
Dawes.....	1,447	2,747
Dawson.....	2,270	5,017
Deuel.....	406	1,125
Dixon.....	1,463	2,382
Dodge.....	4,278	6,083
Douglas.....	63,762	53,443
Dundy.....	613	1,320
Fillmore.....	1,788	3,362
Franklin.....	969	2,085
Frontier.....	758	1,855
Furnas.....	1,329	2,870
Gage.....	4,238	7,352
Garden.....	541	1,248
Garfield.....	408	896
Gosper.....	484	935
Grant.....	172	327
Greeley.....	1,265	1,242
Hall.....	4,768	7,651
Hamilton.....	1,330	3,057
Harlan.....	1,006	1,991
Hayes.....	387	782
Hitchcock.....	877	1,556
Holt.....	2,565	4,198
Hooker.....	103	330
Howard.....	2,042	1,556
Jefferson.....	2,187	4,257
Johnson.....	1,019	2,649
Kearney.....	1,267	1,782
Keith.....	1,147	1,739
Keya Paha.....	334	781
Kimball.....	576	1,169
Knox.....	2,487	3,762
Lancaster.....	19,338	26,715
Lincoln.....	4,344	5,969
Logan.....	244	450
Loup.....	182	488
McPherson.....	118	310
Madison.....	3,373	6,892
Merrick.....	1,390	2,691
Morrill.....	1,108	1,998
Nance.....	1,113	1,697
Nemaha.....	1,785	3,267
Nuckolls.....	1,607	2,685
Otoe.....	2,664	5,291
Pawnee.....	1,275	2,254
Perkins.....	806	1,301
Phelps.....	1,451	2,460
Pierce.....	1,204	2,956
Platte.....	3,448	4,509
Polk.....	1,517	2,357
Red Willow.....	2,132	3,107
Richardson.....	3,483	4,482
Rock.....	506	984
Saline.....	3,899	3,255
Sarpy.....	2,654	2,641
Saunders.....	4,199	6,615
Scotts Bluff.....	3,733	6,947
Seward.....	2,083	3,721
Sheridan.....	1,031	2,570
Sherman.....	1,584	1,309
Sioux.....	408	876
Stanton.....	874	1,682
Thayer.....	1,644	3,554
Thomas.....	214	338
Thurston.....	1,632	1,584

NEBRASKA (cont.)

County	1944	
	Dem.	Rep.
Valley.....	1,475	2,096
Washington.....	2,274	2,844
Wayne.....	1,021	2,886
Webster.....	1,094	2,523
Wheeler.....	310	392
York.....	1,808	4,885
Totals.....	233,246	329,888

NEVADA

County	1944	
	Dem.	Rep.
Churchill.....	1,046	1,130
Clark.....	7,350	4,543
Douglas.....	282	556
Elko.....	2,280	1,642
Esmeralda.....	223	150
Eureka.....	217	317
Humboldt.....	994	835
Lander.....	383	425
Lincoln.....	1,295	524
Lyon.....	708	895
Mineral.....	1,344	751
Nye.....	943	723
Ormsby.....	665	841
Pershing.....	524	538
Storey.....	173	163
Washoe.....	8,384	9,024
White Pine.....	2,812	1,554
Totals.....	29,623	24,611

NEW HAMPSHIRE

County	1944	
	Dem.	Rep.
Belknap.....	5,325	6,188
Carroll.....	2,461	5,251
Cheshire.....	7,098	8,334
Coos.....	8,709	6,209
Grafton.....	8,743	10,947
Hillsborough.....	42,306	25,921
Merrimack.....	13,382	14,599
Rockingham.....	13,170	17,144
Strafford.....	12,497	9,388
Sullivan.....	5,972	5,935
Totals.....	119,663	109,916

Other party votes 1944: Socialist 46; total state vote 1944: 229,624.

NEW JERSEY

County	1944	
	Dem.	Rep.
Atlantic.....	28,972	25,593
Bergen.....	76,350	142,836
Burlington.....	22,623	18,765

NEW JERSEY (cont.)

County	1944	
	Dem.	Rep.
Aspen	85,691	42,197
Aspen May	6,835	8,252
Burlington	15,674	14,477
Cape May	174,320	178,989
Cape May	17,758	16,684
Cape May	191,354	117,087
Cape May	6,774	9,843
Cape May	52,383	36,844
Cape May	60,504	45,232
Cape May	34,720	49,349
Cape May	21,454	39,732
Cape May	7,683	13,317
Cape May	68,737	67,856
Cape May	10,345	7,942
Cape May	14,467	20,266
Cape May	5,237	8,817
Cape May	75,969	86,543
Cape May	10,024	10,714
Cape May	987,874	961,335

Other party votes 1944: Prohibition 4,255; Socialist Labor 6,939; Socialist 3,358; total state vote 1944: 1,963,761.

NEW MEXICO

County	1944	
	Dem.	Rep.
Albuquerque	12,229	11,662
Albuquerque	589	699
Albuquerque	3,350	3,149
Albuquerque	3,017	2,661
Albuquerque	3,271	2,326
Albuquerque	660	554
Albuquerque	4,172	3,149
Albuquerque	5,228	2,083
Albuquerque	3,472	1,970
Albuquerque	1,539	1,649
Albuquerque	647	820
Albuquerque	807	367
Albuquerque	2,938	1,227
Albuquerque	1,342	1,455
Albuquerque	1,383	1,074
Albuquerque	2,210	1,547
Albuquerque	1,425	1,783
Albuquerque	1,892	1,467
Albuquerque	3,215	1,413
Albuquerque	4,952	4,289
Albuquerque	3,190	1,384
Albuquerque	2,060	1,990
Albuquerque	1,445	1,757
Albuquerque	6,054	4,882
Albuquerque	6,482	6,285
Albuquerque	1,534	1,372
Albuquerque	2,489	2,703
Albuquerque	3,463	3,342
Albuquerque	1,921	2,509
Albuquerque	1,987	1,900
Albuquerque	3,318	3,436
Albuquerque	81,389	70,688

Other party votes 1944: Prohibition 148; total state vote 1944: 62,225.

NEW YORK

County	1944	
	Dem.	Rep.
Albany	65,726	60,543
Allegany	4,404	13,454
Broome	28,218	44,013
Cattaraugus	10,679	19,907
Cayuga	12,325	18,680
Chautauqua	19,703	32,824
Chemung	12,894	22,198
Chenango	4,645	12,745
Clinton	8,996	8,775
Columbia	6,220	13,055
Cortland	4,480	10,450
Delaware	4,473	14,916
Dutchess	20,488	32,890
Erie	176,554	185,975
Essex	4,103	10,128
Franklin	7,188	9,225
Fulton	7,882	13,195
Genesee	6,276	13,478
Greene	4,787	9,807
Hamilton	766	1,834
Herkimer	11,260	15,656
Jefferson	13,517	21,834
Lewis	3,141	6,256
Livingston	5,763	11,383
Madison	5,740	13,369
Monroe	108,972	111,725
Montgomery	13,202	4,726
Nassau	68,137	159,713
Niagara	31,008	37,614
Oneida	44,752	48,749
Onondaga	64,729	80,507
Ontario	8,421	16,859
Orange	21,465	39,041
Orleans	3,622	9,998
Oswego	11,510	19,733
Otsego	7,193	15,427
Putnam	3,644	7,010
Rensselaer	27,562	37,819
Rockland	11,711	19,471
St. Lawrence	13,896	21,919
Saratoga	12,056	20,197
Schenectady	30,262	35,178
Schoharie	3,688	6,546
Schuyler	1,566	4,506
Seneca	3,874	7,424
Steuben	12,762	25,538
Suffolk	27,577	65,650
Sullivan	7,218	11,258
Tioga	3,411	8,934
Tompkins	6,377	12,805
Ulster	15,222	26,703
Warren	6,124	12,144
Washington	6,466	13,861
Wayne	6,418	17,523
Westchester	91,461	174,635
Wyoming	4,248	10,219
Yates	1,792	6,338

NEW YORK CITY

Bronx	265,591	211,158
Kings	472,020	393,926
New York	350,508	258,650
Queens	231,780	365,365
Richmond	27,855	42,188

NEW YORK (cont.)

County	1944	
	Dem.	Rep.
Total N. Y. C.	1,347,754	1,271,287
Total N. Y. State	2,478,598	2,987,647
	2,896,016*	

*Total Democratic vote includes American Labor vote of 496,405; other parties: Socialist 14,352; Liberal 10,553; total state vote 1944: 3,316,790.

NORTH CAROLINA

County	1944	
	Dem.	Rep.
Alamance	9,184	4,976
Alexander	2,282	2,971
Alleghany	1,810	1,495
Anson	3,582	510
Ashe	4,363	5,524
Avery	838	3,178
Beaufort	4,706	1,133
Bertie	3,142	124
Bladen	2,542	731
Brunswick	2,346	1,997
Buncombe	20,878	9,398
Burke	6,795	5,855
Cabarrus	9,064	4,233
Caldwell	5,419	4,365
Camden	722	193
Carteret	3,489	1,566
Caswell	1,923	492
Catawba	10,146	7,211
Chatham	3,856	2,431
Cherokee	2,582	2,625
Chowan	1,314	166
Clay	1,245	1,263
Cleveland	8,170	2,636
Columbus	5,717	1,552
Craven	4,872	826
Cumberland	6,615	2,014
Currituck	1,049	231
Dare	966	259
Davidson	9,455	9,445
Davie	2,266	3,244
Duplin	5,464	1,437
Durham	12,763	3,690
Edgecomb	6,762	448
Forsyth	16,390	10,014
Franklin	3,967	289
Gaston	13,744	6,023
Gates	1,105	153
Graham	1,889	1,356
Granville	3,215	325
Greene	2,528	113
Guilford	23,495	12,962
Halifax	6,989	440
Harnett	6,579	3,191
Haywood	7,755	2,919
Henderson	5,679	4,613
Hertford	1,996	125
Hoke	1,782	160
Hyde	924	323
Iredell	8,358	4,864
Jackson	4,109	2,694
Johnston	8,282	4,423
Jones	1,221	211
Lee	3,448	808

NORTH CAROLINA (cont.)

County	1944	
	Dem.	Rep.
Lenoir.....	5,253	554
Lincoln.....	4,168	3,678
Macon.....	2,855	2,510
Madison.....	2,291	4,388
McDowell.....	4,008	2,258
Martin.....	4,408	133
Mecklenburg.....	25,950	9,434
Mitchell.....	1,024	3,192
Montgomery.....	2,665	1,963
Moore.....	3,711	2,663
Nash.....	7,577	876
New Hanover.....	9,476	2,829
Northampton.....	3,470	172
Onslow.....	2,711	433
Orange.....	3,274	1,467
Pamlico.....	1,295	719
Pasquotank.....	2,540	860
Pender.....	1,732	441
Perquimans.....	960	266
Person.....	2,507	607
Pitt.....	8,556	495
Polk.....	2,340	1,678
Randolph.....	7,277	8,786
Richmond.....	5,394	938
Robeson.....	7,278	1,118
Rockingham.....	8,755	3,024
Rowan.....	9,721	5,862
Rutherford.....	7,379	4,698
Sampson.....	4,220	6,062
Scotland.....	2,372	303
Stanly.....	5,499	6,083
Stokes.....	4,110	3,376
Surry.....	7,679	5,116
Swain.....	2,110	1,505
Transylvania.....	3,019	2,251
Tyrrell.....	611	281
Union.....	5,729	1,114
Vance.....	4,110	528
Wake.....	18,050	3,996
Warren.....	2,480	242
Washington.....	1,782	497
Watauga.....	3,214	3,954
Wayne.....	6,228	1,914
Wilkes.....	5,578	9,121
Wilson.....	6,480	769
Yadkin.....	2,470	4,392
Yancey.....	3,301	2,402
Totals.....	527,399	263,155

NORTH DAKOTA

County	1944	
	Dem.	Rep.
Adams.....	668	966
Barnes.....	2,922	3,696
Benson.....	2,261	1,726
Billings.....	209	354
Bottineau.....	1,953	2,663
Bowman.....	609	785
Burke.....	1,226	1,540
Burleigh.....	3,061	4,616
Cass.....	10,390	10,661
Cavalier.....	2,274	2,011
Dickey.....	1,339	2,134
Divide.....	1,513	1,225
Dunn.....	919	1,374
Eddy.....	1,042	974
Emmons.....	656	2,255

NORTH DAKOTA (cont.)

County	1944	
	Dem.	Rep.
Foster.....	1,102	891
Golden Valley.....	443	709
Grand Forks.....	7,707	5,668
Grant.....	410	1,745
Griggs.....	1,228	990
Hettinger.....	554	1,812
Kidder.....	693	1,397
LaMoure.....	1,422	2,298
Logan.....	294	1,904
McHenry.....	1,934	3,141
McIntosh.....	226	2,682
McKenzie.....	1,592	1,241
McLean.....	2,326	2,822
Mercer.....	445	2,504
Morton.....	1,850	2,537
Mountrail.....	1,981	1,666
Nelson.....	1,925	1,506
Oliver.....	219	756
Pembina.....	2,903	2,410
Pierce.....	1,307	1,992
Ramsey.....	2,539	2,505
Ransom.....	1,639	2,044
Renville.....	1,095	1,046
Richland.....	3,192	4,402
Rolette.....	1,745	1,070
Sargent.....	1,426	1,488
Sheridan.....	386	1,910
Sioux.....	445	673
Slope.....	439	434
Stark.....	1,534	2,852
Steele.....	1,320	1,042
Stutsman.....	3,243	4,220
Towner.....	1,185	1,097
Trail.....	2,479	2,370
Walsh.....	7,747	2,471
Ward.....	5,822	5,514
Wells.....	1,557	2,529
Williams.....	3,748	2,217
Totals.....	100,144	118,535

Other party votes 1944: Prohibition 549; Socialist 943; total state vote 1944: 220,171.

OHIO

County	1944	
	Dem.	Rep.
Adams.....	3,998	5,590
Allen.....	12,564	21,024
Ashland.....	6,130	8,994
Ashtabula.....	13,319	17,181
Athens.....	7,438	10,326
Auglaize.....	4,888	8,980
Belmont.....	24,093	15,485
Brown.....	4,743	5,024
Butler.....	26,698	22,702
Carroll.....	2,907	4,898
Champaign.....	4,800	7,795
Clark.....	22,362	22,207
Clermont.....	7,937	9,125
Clinton.....	3,713	7,200
Columbiana.....	18,796	19,976
Coshocton.....	6,126	7,917
Crawford.....	7,079	10,464
Cuyahoga.....	330,659	217,824
Darke.....	8,036	11,135
Defiance.....	3,634	7,450

OHIO (cont.)

County	1944	
	Dem.	Rep.
Delaware.....	4,569	9,186
Erie.....	7,753	10,663
Fairfield.....	8,439	11,135
Fayette.....	3,945	5,933
Franklin.....	89,394	99,295
Fulton.....	2,147	8,255
Gallia.....	2,968	6,464
Geauga.....	3,264	5,295
Greene.....	7,937	9,680
Guernsey.....	6,512	8,878
Hamilton.....	144,470	154,960
Hancock.....	6,252	13,450
Hardin.....	5,128	8,566
Harrison.....	3,381	5,194
Henry.....	2,605	7,241
Highland.....	5,336	7,963
Hocking.....	3,766	4,535
Holmes.....	2,563	3,093
Huron.....	5,879	11,442
Jackson.....	4,666	6,786
Jefferson.....	24,827	15,496
Knox.....	5,573	9,963
Lake.....	12,713	13,697
Lawrence.....	7,966	9,312
Licking.....	12,819	16,815
Logan.....	4,944	9,882
Lorain.....	25,254	23,866
Lucas.....	76,109	77,247
Madison.....	3,374	5,546
Mahoning.....	70,102	35,184
Marion.....	8,775	11,925
Medina.....	6,003	10,375
Meigs.....	3,399	6,401
Mercer.....	4,522	7,712
Miami.....	10,476	14,751
Monroe.....	3,574	3,617
Montgomery.....	82,367	63,336
Morgan.....	1,665	4,309
Morrow.....	2,356	5,439
Muskingum.....	12,729	17,577
Noble.....	2,235	4,130
Ottawa.....	4,941	6,922
Paulding.....	2,355	4,515
Perry.....	5,050	7,339
Pickaway.....	5,362	5,997
Pike.....	3,968	3,117
Portage.....	12,533	12,284
Preble.....	4,872	6,609
Putnam.....	3,145	8,004
Richland.....	15,406	18,065
Ross.....	9,928	11,424
Sandusky.....	6,129	13,763
Scioto.....	17,134	17,489
Seneca.....	6,224	15,137
Shelby.....	5,622	7,084
Stark.....	57,393	51,506
Summit.....	90,783	64,696
Trumbull.....	34,312	25,150
Tuscarawas.....	16,184	14,357
Union.....	2,907	6,908
Van Wert.....	5,046	8,529
Vinton.....	1,826	2,719
Warren.....	5,765	8,598
Washington.....	7,023	11,676
Wayne.....	9,506	13,616
Williams.....	3,417	8,738
Wood.....	8,025	16,016
Wyandot.....	3,231	6,144
Totals.....	1,570,763	1,582,293

OKLAHOMA

County	1944	
	Dem.	Rep.
Adair	2,760	2,792
Alfalfa	1,716	3,434
Atoka	2,172	1,515
Beaver	1,355	1,913
Beckham	3,608	2,034
Blaine	2,097	3,480
Bryan	7,180	1,677
Caddo	6,850	5,529
Canadian	4,800	4,674
Carter	9,184	2,446
Cherokee	3,415	3,336
Choctaw	4,358	1,404
Cimarron	746	822
Cleveland	5,240	3,642
Coal	1,959	760
Comanche	7,342	4,109
Cotton	2,711	1,266
Craig	3,363	3,111
Creek	8,342	7,549
Custer	3,928	3,349
Delaware	2,373	2,660
DeWey	1,808	2,166
Dis	1,104	1,939
Edmond	7,879	11,211
Elmer	5,328	2,086
Ellis	7,689	4,069
Grant	2,045	3,021
Greer	2,984	1,075
Harmon	1,933	503
Harper	1,056	1,394
Haskell	2,924	2,102
Hughes	5,009	2,484
Jackson	4,866	1,313
Jefferson	2,948	974
Johnston	2,339	925
Kay	8,656	9,498
Kingfisher	2,175	3,417
Kiowa	4,175	2,081
Kramer	1,948	1,296
Leflore	5,660	3,667
LeFlore	3,910	4,801
Logan	3,795	4,586
Love	1,955	446
McCain	3,301	1,492
McCurdy	5,322	1,419
McIntosh	3,190	2,569
Major	965	3,019
Marshall	2,261	752
Martins	3,830	3,822
Murray	2,602	1,005
Muskogee	11,679	8,280
Noble	2,300	3,060
Nowata	2,581	2,730
Ottawa	3,291	2,177
Pawnee	57,812	42,464
Pawnee	9,737	5,430
Pawnee	6,840	5,557
Pawnee	5,876	5,056
Pawnee	2,460	3,310
Pawnee	5,624	6,048
Pawnee	8,535	4,068
Pawnee	6,552	2,960
Pawnee	9,130	6,486
Pawnee	2,848	1,181
Pawnee	2,015	1,148
Pawnee	3,209	3,739
Pawnee	7,116	4,560
Pawnee	3,571	2,893
Pawnee	6,189	2,766
Pawnee	2,119	1,731

OKLAHOMA (cont.)

County	1944	
	Dem.	Rep.
Tillman	3,902	1,496
Tulsa	33,436	42,663
Wagoner	2,373	3,467
Washington	5,090	6,533
Washita	3,524	2,706
Woods	2,426	3,226
Woodward	2,152	3,055
Totals	401,549	319,424

Other party votes 1944: Prohibition Party 1,663; total state vote 1944: 722,636.

OREGON

County	1944	
	Dem.	Rep.
Baker	3,116	2,494
Benton	2,830	5,242
Clackamas	14,060	12,492
Clatsop	6,038	3,921
Columbia	5,213	2,696
Coos	6,476	4,609
Crook	1,145	932
Curry	678	827
Deschutes	3,807	2,547
Douglas	4,563	6,134
Gilliam	567	492
Grant	1,072	1,006
Harney	997	787
Hood River	1,960	2,008
Jackson	6,668	8,598
Jefferson	297	419
Josephine	3,214	4,010
Klamath	6,656	5,969
Lake	1,147	1,008
Lane	14,375	17,690
Lincoln	2,947	2,801
Linn	6,480	6,877
Malheur	2,234	2,797
Marion	11,907	16,176
Morrow	836	747
Multnomah	105,516	78,279
Polk	3,318	3,904
Sherman	518	475
Tillamook	2,634	2,477
Umatilla	4,967	5,379
Union	3,951	2,413
Wallowa	1,544	1,152
Wasco	2,313	2,429
Washington	9,110	9,362
Wheeler	414	544
Yamhill	5,067	5,672
Totals	248,635	225,365

Other party votes 1944: Socialist 3,785; Independent 2,362; total state vote 1944: 480,147.

PENNSYLVANIA

County	1944	
	Dem.	Rep.
Adams	5,881	8,787
Allegheny	350,690	261,218
Armstrong	10,202	13,656

PENNSYLVANIA (cont.)

County	1944	
	Dem.	Rep.
Beaver	32,743	23,555
Bedford	5,175	8,703
Berks	43,889	35,274
Blair	18,003	24,925
Bradford	5,523	13,472
Bucks	17,823	25,634
Butler	12,377	19,341
Cambria	39,676	28,203
Cameron	1,115	1,729
Carbon	11,060	9,837
Centre	8,064	10,048
Chester	18,548	26,655
Clarion	5,263	8,098
Clearfield	13,617	13,986
Clinton	5,703	5,915
Columbia	9,647	9,336
Crawford	9,216	15,205
Cumberland	12,068	17,782
Dauphin	30,684	44,725
Delaware	64,021	78,533
Elk	6,097	5,645
Erie	32,912	35,247
Fayette	35,093	21,945
Forest	673	1,344
Franklin	8,807	13,380
Fulton	1,758	2,084
Greene	8,392	5,747
Huntingdon	4,131	8,106
Indiana	8,863	14,388
Jefferson	6,425	10,970
Juniata	2,666	3,512
Lackawanna	59,190	47,261
Lancaster	27,353	44,888
Lawrence	17,331	18,886
Lebanon	11,818	15,206
Lehigh	29,134	31,584
Luzerne	73,674	67,984
Lycoming	15,658	19,886
McKean	6,492	11,988
Mercer	16,589	19,606
Mifflin	5,693	6,205
Monroe	5,490	6,202
Montgomery	47,815	78,260
Montour	2,212	2,727
Northampton	32,584	26,643
Northumberland	20,333	21,995
Perry	3,265	5,722
Philadelphia	496,367	346,380
Pike	1,408	2,674
Potter	1,894	4,474
Schuylkill	35,852	40,671
Snyder	1,795	5,696
Somerset	10,287	16,039
Sullivan	1,329	1,858
Susquehanna	4,212	8,819
Tioga	3,248	10,381
Union	1,704	5,585
Venango	6,426	14,916
Warren	4,440	9,276
Washington	46,023	27,615
Wayne	2,793	8,242
Westmoreland	61,057	43,202
Wyoming	1,982	4,581
York	38,226	32,617
Totals	1,940,479	1,835,054

Other party votes 1944: Socialist 11,721; Prohibition 5,750; Socialist Labor 1,789; total state vote all parties 1944: 3,794,793.

RHODE ISLAND

County	1944	
	Dem.	Rep.
Bristol.....	6,287	4,919
Kent.....	14,059	13,710
Newport.....	11,375	9,435
Providence.....	137,216	87,190
Washington.....	6,419	8,233
Totals.....	175,356	123,487

Other party votes 1944: 433; total state vote 1944: 299,276.

SOUTH CAROLINA

County	1944	
	Dem.	Rep.
Abbeville.....	789	19
Aiken.....	2,403	58
Allendale.....	678	..
Anderson.....	2,687	87
Bamberg.....	737	106
Barnwell.....	1,482	8
Beaufort.....	594	107
Berkeley.....	521	32
Calhoun.....	602	1
Charleston.....	6,260	1,184
Cherokee.....	1,620	68
Chester.....	1,441	89
Chesterfield.....	3,222	15
Clarendon.....	1,053	27
Colleton.....	1,653	45
Darlington.....	1,808	46
Dillon.....	864	27
Dorchester.....	1,181	65
Edgefield.....	654	3
Fairfield.....	798	20
Florence.....	2,822	111
Georgetown.....	1,197	52
Greenville.....	7,107	711
Greenwood.....	2,381	71
Hampton.....	575	3
Horry.....	2,403	137
Jasper.....	230	18
Kershaw.....	1,872	21
Lancaster.....	2,383	13
Laurens.....	1,924	38
Lee.....	764	50
Lexington.....	1,986	20
McCormick.....	307	1
Marion.....	858	9
Marlboro.....	874	33
Newberry.....	1,940	68
Oconee.....	1,316	106
Orangeburg.....	2,440	70
Pickens.....	1,662	211
Richland.....	6,590	140
Saluda.....	924	12
Spartanburg.....	8,092	402
Sumter.....	2,111	69
Union.....	3,041	30
Williamsburg.....	1,118	24
York.....	2,637	127
Totals.....	90,601	4,547

Other party votes 1944: Prohibition 365; Southern Democrats 7,799; Tolbert Faction 63; total state vote 1944: 103,375.

SOUTH DAKOTA

County	1944	
	Dem.	Rep.
Aurora.....	1,011	1,163
Beadle.....	3,842	3,610
Bennett.....	566	494
Bon Homme.....	1,981	2,553
Brookings.....	2,073	4,136
Brown.....	6,352	5,611
Brule.....	1,412	1,002
Buffalo.....	250	324
Butte.....	928	1,824
Campbell.....	208	1,047
Charles Mix.....	2,701	2,171
Clark.....	1,209	1,936
Clay.....	1,796	1,970
Codington.....	3,120	3,348
Corson.....	786	1,008
Custer.....	712	1,288
Davison.....	3,222	2,929
Day.....	2,487	2,593
Deuel.....	1,180	1,910
Dewey.....	511	913
Douglas.....	719	1,483
Edmunds.....	961	1,762
Fall River.....	1,122	1,938
Faulk.....	896	1,090
Grant.....	1,475	2,278
Gregory.....	1,613	2,067
Haakon.....	381	638
Hamlin.....	1,020	1,811
Hand.....	1,146	1,558
Hanson.....	864	1,070
Harding.....	493	552
Hughes.....	938	1,676
Hutchinson.....	699	3,799
Hyde.....	454	842
Jackson.....	213	340
Jerauld.....	731	1,217
Jones.....	264	465
Kingsbury.....	1,156	2,541
Lake.....	1,543	2,956
Lawrence.....	1,866	3,528
Lincoln.....	1,625	3,298
Lyman.....	630	867
McCook.....	1,163	2,516
McPherson.....	410	2,290
Marshall.....	1,363	1,511
Meade.....	1,164	1,912
Mellette.....	410	544
Miner.....	1,090	1,544
Minnehaha.....	10,216	13,920
Moody.....	1,420	2,080
Pennington.....	3,517	5,246
Perkins.....	995	1,325
Potter.....	717	1,001
Roberts.....	3,024	2,721
Sanborn.....	998	1,212
Shannon.....	4	..
Spink.....	2,285	2,365
Stanley.....	234	384
Sully.....	300	612
Todd.....	480	562
Tripp.....	1,640	1,911
Turner.....	1,304	3,549
Union.....	2,057	2,501
Walworth.....	1,222	1,533
Washabaugh.....	683	737
Washington.....	146	139
Yankton.....	2,359	3,313
Ziebach.....	354	331
Totals.....	96,711	135,365

TENNESSEE

County	1944	
	Dem.	Rep.
Anderson.....	3,476	3,424
Bedford.....	2,651	733
Benton.....	1,901	1,195
Bledsoe.....	795	1,187
Blount.....	2,836	6,191
Bradley.....	1,312	2,611
Campbell.....	2,008	3,244
Cannon.....	1,002	627
Carroll.....	2,077	2,996
Carter.....	1,662	4,873
Cheatham.....	1,398	216
Chester.....	1,156	931
Claiborne.....	1,649	2,426
Clay.....	754	650
Cocke.....	989	3,554
Coffee.....	2,703	568
Crockett.....	1,421	782
Cumberland.....	1,174	1,786
Davidson.....	26,493	10,174
Decatur.....	1,515	1,235
DeKalb.....	2,341	2,161
Dickson.....	2,379	600
Dyer.....	3,368	1,190
Fayette.....	1,417	172
Fentress.....	657	1,696
Franklin.....	3,958	600
Gibson.....	4,632	1,568
Giles.....	4,249	751
Grainger.....	605	1,938
Greene.....	2,726	4,922
Grundy.....	1,462	406
Hamblen.....	1,723	2,001
Hamilton.....	17,527	10,379
Hancock.....	431	1,929
Hardeman.....	1,949	444
Hardin.....	1,358	2,124
Hawkins.....	1,756	3,692
Haywood.....	2,525	208
Henderson.....	1,009	2,570
Henry.....	3,111	702
Hickman.....	2,223	618
Houston.....	976	248
Humphreys.....	1,327	367
Jackson.....	1,407	695
Jefferson.....	966	3,159
Johnson.....	450	2,699
Knox.....	18,482	20,742
Lake.....	1,440	150
Lauderdale.....	3,732	381
Lawrence.....	4,662	4,359
Lewis.....	955	252
Lincoln.....	3,735	573
Loudon.....	1,632	3,147
McMinn.....	4,435	3,091
McNairy.....	1,712	2,697
Macon.....	701	2,322
Madison.....	5,706	1,793
Marion.....	2,666	1,761
Marshall.....	3,812	506
Maury.....	4,814	747
Meigs.....	727	532
Monroe.....	3,385	3,424
Montgomery.....	2,971	702
Moore.....	742	143
Morgan.....	1,201	1,395
Obion.....	3,670	616
Overton.....	1,449	938
Perry.....	771	387
Pickett.....	416	767
Polk.....	4,842	370

TENNESSEE (cont.)

County	1944	
	Dem.	Rep.
Putnam.....	2,788	1,770
Rhea.....	1,581	1,880
Roane.....	1,971	2,711
Robertson.....	3,074	622
Rutherford.....	4,730	879
Scott.....	850	1,971
Sequatchie.....	851	417
Sevier.....	711	4,930
Shelby.....	48,625	10,839
Smith.....	2,107	887
Stewart.....	1,916	335
Sullivan.....	6,290	5,223
Sumner.....	4,076	990
Tipton.....	4,046	310
Trousdale.....	1,170	131
Waco.....	779	1,992
Wagoner.....	627	1,768
Wagoner.....	526	291
Warren.....	2,560	848
Washington.....	4,060	6,485
Wayne.....	630	2,185
Weakley.....	3,434	1,595
White.....	1,339	668
Williamson.....	2,656	602
Wilson.....	3,148	942
Totals.....	308,707	200,311

TEXAS

County	1944	
	Dem.	Rep.
Anderson.....	4,342	467
Andrews.....	329	48
Angelina.....	4,387	1,001
Aransas.....	456	150
Archery.....	1,674	194
Armstrong.....	623	132
Atascosa.....	1,757	685
Austin.....	1,316	619
Bailey.....	943	358
Bandera.....	532	634
Bastrop.....	2,604	385
Baylor.....	1,568	102
Bee.....	1,306	848
Bell.....	6,960	763
Bexar.....	35,024	23,588
Brewster.....	846	533
Brown.....	237	34
Brewster.....	2,502	504
Bowie.....	7,045	790
Brazoria.....	5,548	850
Brazos.....	3,353	464
Brewster.....	864	237
Brewster.....	615	80
Brewster.....	403	142
Brewster.....	2,426	430
Brewster.....	1,992	158
Brewster.....	1,697	228
Brewster.....	2,916	704
Brewster.....	732	158
Brewster.....	1,962	224
Brewster.....	5,998	5,309
Brewster.....	977	180
Brewster.....	1,216	446
Brewster.....	2,866	541

TEXAS (cont.)

County	1944	
	Dem.	Rep.
Castro.....	838	222
Chambers.....	1,038	179
Cherokee.....	3,918	598
Childress.....	2,295	299
Clay.....	2,307	311
Cochran.....	716	123
Coke.....	824	65
Coleman.....	2,887	498
Collin.....	6,574	974
Collingsworth.....	1,725	261
Colorado.....	1,517	638
Comal.....	787	2,021
Comanche.....	2,941	356
Concho.....	1,090	151
Cooke.....	3,270	919
Coryell.....	2,518	413
Cottle.....	2,551	130
Crane.....	552	58
Crockett.....	323	112
Crosby.....	1,691	201
Culberson.....	200	17
Dallam.....	1,118	323
Dallas.....	60,909	21,099
Dawson.....	2,149	472
Deaf Smith.....	1,117	508
Delta.....	1,706	133
Denton.....	558	771
DeWitt.....	1,884	1,879
Dickens.....	1,617	141
Dimmit.....	554	328
Donley.....	1,170	280
Duval.....	3,353	136
Eastland.....	4,607	643
Ector.....	2,265	432
Edwards.....	348	187
Ellis.....	7,065	666
El Paso.....	11,426	2,072
Erath.....	3,330	411
Falls.....	3,191	377
Fannin.....	5,984	677
Fayette.....	3,156	1,611
Fisher.....	2,041	154
Floyd.....	1,756	370
Foard.....	925	84
Fort Bend.....	2,781	442
Franklin.....	1,336	147
Freestone.....	2,427	277
Frio.....	951	293
Gaines.....	1,173	173
Galveston.....	11,751	1,542
Garza.....	842	144
Gillespie.....	333	2,950
Glasscock.....	185	34
Goliad.....	641	609
Gonzales.....	2,805	841
Gray.....	3,067	1,739
Grayson.....	11,636	1,372
Gregg.....	6,401	1,412
Grimes.....	1,559	137
Guadalupe.....	1,583	2,556
Hale.....	3,066	712
Hall.....	1,812	164
Hamilton.....	1,790	344
Hansford.....	590	203
Hardeman.....	1,756	223
Hardin.....	2,632	243
Harris.....	71,077	11,843
Harrison.....	3,588	619
Hartley.....	484	26
Haskell.....	2,573	261

TEXAS (cont.)

County	1944	
	Dem.	Rep.
Hays.....	1,690	495
Hemphill.....	792	274
Henderson.....	3,219	427
Hidalgo.....	7,250	4,080
Hill.....	4,876	516
Hockley.....	2,641	319
Hood.....	1,203	146
Hopkins.....	3,981	533
Houston.....	2,329	233
Howard.....	3,588	334
Hudspeth.....	333	35
Hunt.....	6,200	714
Hutchinson.....	2,760	864
Irion.....	363	54
Jack.....	1,484	217
Jackson.....	1,708	344
Jasper.....	1,850	341
Jeff Davis.....	331	51
Jefferson.....	22,066	4,525
Jim Hogg.....	620	77
Jim Wells.....	1,908	1,113
Johnson.....	4,757	546
Jones.....	3,417	361
Karnes.....	1,920	692
Kaufman.....	4,251	430
Kendall.....	309	1,337
Kenedy.....	16	60
Kent.....	572	31
Kerr.....	1,377	1,358
Kimble.....	880	225
King.....	228	13
Kinney.....	401	200
Kleberg.....	1,473	421
Knox.....	1,785	156
Lamar.....	6,283	725
Lamb.....	2,407	616
Lampasas.....	1,693	212
LaSalle.....	692	127
Lavaca.....	3,406	960
Lee.....	953	771
Leon.....	1,569	140
Liberty.....	2,561	336
Limestone.....	4,299	239
Lipscomb.....	551	396
Live Oak.....	642	548
Llano.....	1,199	198
Loving.....	60	18
Lubbock.....	7,654	1,169
Lynn.....	1,968	263
McCulloch.....	2,088	463
McLennan.....	15,336	1,668
McMullen.....	223	106
Madison.....	1,115	65
Marion.....	1,057	219
Martin.....	758	131
Mason.....	822	420
Matagorda.....	1,854	412
Maverick.....	787	302
Medina.....	1,469	1,607
Menard.....	776	96
Midland.....	1,688	302
Milam.....	3,537	623
Mills.....	1,428	172
Mitchell.....	2,215	218
Montague.....	2,900	429
Montgomery.....	2,902	219
Moore.....	999	313
Morris.....	1,269	122
Motley.....	744	107
Nacogdoches.....	3,226	319

TEXAS (cont.)

County	1944	
	Dem.	Rep.
Navarro.....	6,298	449
Newton.....	910	187
Nolan.....	3,071	322
Nueces.....	11,087	3,819
Ochiltree.....	863	307
Oldham.....	277	93
Orange.....	4,500	910
Palo Pinto.....	3,291	416
Panola.....	2,106	221
Parker.....	3,503	59
Parmer.....	810	415
Pecos.....	1,226	305
Polk.....	1,817	154
Potter.....	6,519	2,759
Presidio.....	648	211
Rains.....	628	137
Randall.....	1,439	409
Reagan.....	426	53
Real.....	326	163
Red River.....	2,991	466
Reeves.....	1,157	201
Refugio.....	991	376
Roberts.....	289	89
Robertson.....	2,681	126
Rockwall.....	1,153	98
Runnels.....	2,657	685
Rusk.....	5,232	637
Sabine.....	1,169	203
San Augustine.....	1,176	102
San Jacinto.....	522	53
San Patricio.....	2,712	878
San Saba.....	2,109	177
Schleicher.....	520	84
Scurry.....	1,761	285
Shackelford.....	1,007	135
Shelby.....	2,927	428
Sherman.....	454	97
Smith.....	6,671	936
Somervell.....	406	87
Starr.....	1,312	68
Stephens.....	2,104	217
Sterling.....	330	18
Stonewall.....	902	89
Sutton.....	449	118
Swisher.....	1,275	331
Tarrant.....	36,791	4,113
Taylor.....	7,975	602
Terrell.....	329	156
Terry.....	2,304	273
Throckmorton.....	970	76
Titus.....	2,612	265
Tom Green.....	6,272	1,125
Travis.....	14,384	2,324
Trinity.....	1,132	127
Tyler.....	1,037	219
Upshur.....	2,369	446
Upton.....	742	105
Uvalde.....	1,322	858
Val Verde.....	1,210	676
Van Zandt.....	3,139	503
Victoria.....	2,331	936
Walker.....	1,638	145
Waller.....	1,007	190
Ward.....	1,449	268
Washington.....	1,387	534
Webb.....	4,742	776
Wharton.....	3,754	529
Wheeler.....	1,869	511
Wichita.....	11,392	1,597
Wilbarger.....	3,382	1,517

TEXAS (cont.)

County	1944	
	Dem.	Rep.
Willacy.....	846	754
Williamson.....	5,284	1,239
Wilson.....	2,666	676
Winkler.....	1,004	120
Wise.....	3,114	444
Wood.....	3,045	485
Yoakum.....	646	106
Young.....	3,183	327
Zapata.....	501	43
Zavala.....	696	342
Totals.....	821,605	191,425

Other party votes 1944: Prohibition 1,017; Socialist 594; Texas Regulars, 135,689; total state vote 1944: 1,150,330.

UTAH

County	1944	
	Dem.	Rep.
Beaver.....	1,128	958
Box Elder.....	4,138	3,058
Cache.....	6,998	4,938
Carbon.....	5,364	2,318
Daggett.....	98	75
Davis.....	5,179	3,663
Duchesne.....	1,629	1,140
Emery.....	1,427	974
Garfield.....	559	842
Grand.....	380	428
Iron.....	1,677	1,930
Juab.....	1,483	1,192
Kane.....	244	662
Millard.....	1,909	1,889
Morgan.....	671	535
Piute.....	346	381
Rich.....	395	394
Salt Lake.....	66,114	39,327
San Juan.....	367	513
Sanpete.....	3,071	3,196
Sevier.....	2,095	2,345
Summit.....	1,761	1,479
Tooele.....	2,802	1,753
Uintah.....	1,519	1,479
Utah.....	15,722	9,946
Wasatch.....	1,249	1,058
Washington.....	1,694	1,575
Wayne.....	430	325
Weber.....	19,639	9,518
Totals.....	150,088	97,891

Other party votes 1944: Socialist 340; total state vote 1944: 248,319.

VERMONT (cont.)

County	1944	
	Dem.	Rep.
Franklin.....	6,036	4,374
Grand Isle.....	801	667
Lamoille.....	1,031	2,212
Orange.....	1,464	4,117
Orleans.....	2,657	3,801
Rutland.....	7,111	9,554
Washington.....	5,749	7,162
Windham.....	3,376	6,708
Windsor.....	5,089	9,930
Totals.....	53,820	71,527

Other party votes 1944: Scattering 14; total state vote 1944: 125,361.

VIRGINIA

County	1944	
	Dem.	Rep.
Accomack.....	1,747	1,045
Albemarle.....	1,725	964
Alleghany.....	1,985	1,308
Amelia.....	553	295
Amherst.....	2,585	442
Appomattox.....	1,109	270
Arlington.....	2,913	2,319
Augusta.....	7,122	8,317
Bath.....	581	504
Bedford.....	2,534	1,068
Bland.....	762	744
Botetourt.....	1,275	1,272
Brunswick.....	1,239	208
Buchanan.....	2,826	1,971
Buckingham.....	723	286
Campbell.....	1,995	634
Caroline.....	1,004	383
Carroll.....	1,375	2,352
Charles City.....	326	139
Charlotte.....	1,473	356
Chesterfield.....	2,860	901
Clarke.....	816	415
Craig.....	564	327
Culpeper.....	1,022	750
Cumberland.....	463	218
Dickenson.....	2,786	1,762
Dinwiddie.....	1,096	279
Elizabeth City.....	2,563	1,128
Essex.....	508	179
Fairfax.....	3,582	4,046
Fauquier.....	2,110	1,089
Floyd.....	630	1,424
Fluvanna.....	577	291
Franklin.....	2,002	1,206
Frederick.....	1,213	931
Giles.....	1,703	1,203
Gloucester.....	934	410
Goochland.....	691	230
Grayson.....	2,607	3,299
Greene.....	282	39
Greensville.....	954	27
Halifax.....	3,351	51
Hanover.....	1,471	57
Henrico.....	3,056	1,26
Henry.....	1,538	72
Highland.....	535	64
Isle of Wight.....	1,178	43
James City.....	317	16
King George.....	348	34

VIRGINIA (cont.)

County	1944	
	Dem.	Rep.
King and Queen..	363	166
King William.....	718	280
Lancaster.....	666	390
Lee.....	4,470	3,921
Loudoun.....	1,802	1,485
Louisiana.....	930	634
Lunenburg.....	1,205	184
Madison.....	616	811
Mathews.....	615	491
Mecklenburg.....	2,561	430
Middlesex.....	627	186
Montgomery.....	1,652	1,936
Monsemond.....	1,398	351
Nelson.....	1,390	427
New Kent.....	329	158
Northfolk.....	5,467	1,527
Northampton.....	1,108	381
Northumberland..	695	525
Pottoway.....	1,453	472
Prince George.....	1,199	694
Prince William.....	1,653	2,574
Richmond.....	1,383	706
Smyth.....	3,492	1,224
Spartanburg.....	461	230
Spencer.....	1,063	425
Stafford.....	796	301
St. Albans.....	1,340	763
St. James.....	1,959	993
St. John.....	2,155	1,302
St. Lawrence.....	497	297
St. Louis.....	364	336
St. Mary.....	3,380	3,146
St. Michael.....	1,638	961
St. Patrick.....	2,104	3,714
St. Paul.....	2,945	2,385
St. Peter.....	2,888	3,089
St. Vincent.....	1,962	3,517
St. John.....	2,266	2,726
St. James.....	1,599	284
St. Lawrence.....	744	504
St. Michael.....	698	714
St. Patrick.....	602	123
St. Peter.....	773	201
St. Vincent.....	2,832	2,271
St. John.....	1,034	761
St. Lawrence.....	1,849	807
St. Michael.....	2,849	2,792
St. Patrick.....	808	532
St. Peter.....	4,588	1,817
St. Vincent.....	1,465	1,822
St. John.....	760	318
St. Lawrence.....	159,820	107,376
St. Michael.....	82,456	37,867
St. Patrick.....	242,276	145,243

Other party votes 1944: Prohibition 450; Socialist 417; Socialist Labor 90; total state vote 1944: 188,476.

WASHINGTON

County	1944	
	Dem.	Rep.
Adams.....	1,062	1,666
Clinton.....	1,838	1,367
Frederick.....	4,233	3,905

WASHINGTON (cont.)

County	1944	
	Dem.	Rep.
Chelan.....	6,557	7,081
Clallam.....	5,441	3,551
Clark.....	18,861	12,312
Columbia.....	1,039	1,211
Cowlitz.....	10,485	6,157
Douglas.....	1,832	1,809
Ferry.....	792	518
Franklin.....	1,974	1,381
Garfield.....	677	925
Grant.....	2,354	1,530
Grays Harbor.....	13,803	7,834
Island.....	1,662	1,487
Jefferson.....	1,829	1,415
King.....	165,308	118,719
Kitsap.....	24,016	11,224
Kittitas.....	4,227	3,423
Klickitat.....	2,089	1,980
Lewis.....	7,706	8,896
Lincoln.....	2,328	2,723
Mason.....	3,379	1,976
Okanogan.....	4,642	4,084
Pacific.....	3,745	2,419
Pend Oreille.....	1,385	1,052
Pierce.....	53,269	31,626
San Juan.....	644	703
Skagit.....	9,409	7,805
Skamania.....	968	668
Snokomish.....	27,345	15,182
Spokane.....	45,491	36,359
Stevens.....	3,951	3,151
Thurston.....	9,708	7,900
Wahkiakum.....	1,003	532
Walla Walla.....	5,793	7,364
Whatcom.....	14,787	12,890
Whitman.....	5,449	6,000
Yakima.....	15,643	20,864
Totals.....	486,774	361,689

Other party votes 1944: Socialist Labor 1,645; Prohibition 2,396; Socialist 3,824; total state vote 1944: 856,328.

WEST VIRGINIA

County	1944	
	Dem.	Rep.
Barbour.....	3,718	3,993
Berkeley.....	5,819	6,151
Boone.....	6,366	3,449
Braxton.....	4,313	3,023
Brooke.....	5,726	3,588
Cabell.....	23,020	19,861
Calhoun.....	2,254	1,687
Clay.....	2,395	2,114
Doddridge.....	1,000	2,611
Fayette.....	17,529	7,932
Gilmer.....	2,509	1,651
Grant.....	570	2,996
Greenbrier.....	7,231	4,790
Hampshire.....	2,485	1,638
Hancock.....	7,334	4,285
Hardy.....	2,111	1,489
Harrison.....	18,028	14,408
Jackson.....	2,401	4,486
Jefferson.....	3,767	2,103
Kanawha.....	47,400	36,488
Lewis.....	3,350	4,984

WEST VIRGINIA (cont.)

County	1944	
	Dem.	Rep.
Lincoln.....	3,654	4,175
Logan.....	14,692	8,000
McDowell.....	19,300	11,023
Marion.....	17,640	11,584
Marshall.....	7,174	7,800
Mason.....	3,662	5,609
Mercer.....	14,861	10,034
Mineral.....	3,989	4,635
Mingo.....	9,550	4,711
Monongalia.....	10,429	9,647
Monroe.....	2,615	3,130
Morgan.....	895	2,303
Nicholas.....	4,305	3,259
Ohio.....	17,445	16,165
Pendleton.....	2,177	1,838
Pleasants.....	1,507	1,622
Pocahontas.....	2,897	2,340
Preston.....	2,997	6,785
Putnam.....	3,918	4,025
Raleigh.....	17,988	10,323
Randolph.....	6,299	3,681
Ritchie.....	1,650	3,963
Roane.....	3,787	4,650
Summers.....	4,399	2,967
Taylor.....	3,653	3,890
Tucker.....	2,673	2,220
Tyler.....	1,428	3,429
Upshur.....	2,026	5,332
Wayne.....	6,627	4,516
Webster.....	3,285	1,595
Wetzel.....	4,335	3,604
Wirt.....	1,170	1,418
Wood.....	13,676	14,566
Wyoming.....	6,748	4,253
Totals.....	392,777	322,819

WISCONSIN

County	1944	
	Dem.	Rep.
Adams.....	1,478	1,579
Ashland.....	4,609	3,183
Barron.....	5,585	7,137
Bayfield.....	3,362	2,475
Brown.....	17,576	17,762
Buffalo.....	1,948	3,416
Burnett.....	1,868	2,119
Calumet.....	1,966	5,611
Chippewa.....	6,567	7,691
Clark.....	4,612	7,948
Columbia.....	5,997	7,867
Crawford.....	3,130	4,199
Dane.....	37,076	23,021
Dodge.....	7,667	14,102
Door.....	2,599	5,668
Douglas.....	12,985	7,132
Dunn.....	3,853	5,980
Eau Claire.....	8,962	9,470
Florence.....	897	765
Fond du Lac.....	9,378	16,785
Forest.....	2,436	1,391
Grant.....	6,091	10,226
Green.....	4,101	5,556
Green Lake.....	2,190	4,571
Iowa.....	3,585	4,608
Iron.....	2,894	1,345
Jackson.....	3,040	3,182

WISCONSIN (cont.)

County	1944	
	Dem.	Rep.
Jefferson.....	6,988	10,245
Juneau.....	2,857	4,733
Kenosha.....	18,325	12,436
Kewaunee.....	2,611	4,153
La Crosse.....	12,247	12,784
Lafayette.....	3,696	4,421
Langlade.....	4,310	4,036
Lincoln.....	2,938	5,564
Manitowoc.....	11,949	14,047
Marathon.....	13,192	15,782
Marquette.....	6,483	7,159
Marquette.....	1,016	2,853
Milwaukee.....	205,282	142,448
Monroe.....	4,013	7,277
Oconto.....	4,348	5,923
Oneida.....	4,076	3,253
Outagamie.....	9,955	18,294
Ozaukee.....	3,579	5,655
Pepin.....	1,029	1,902
Pierce.....	3,033	5,137
Polk.....	4,489	5,329
Portage.....	8,678	5,405
Price.....	3,515	3,258
Racine.....	25,697	18,220
Richland.....	3,109	5,088

WISCONSIN (cont.)

County	1944	
	Dem.	Rep.
Rock.....	16,766	18,477
Rusk.....	3,238	3,092
St. Croix.....	4,930	5,660
Sauk.....	5,690	9,751
Sawyer.....	1,947	2,421
Shawano.....	4,015	8,732
Sheboygan.....	15,062	15,291
Taylor.....	3,215	3,194
Trempealeau.....	4,496	4,719
Vernon.....	5,409	5,676
Vilas.....	2,079	2,021
Walworth.....	5,696	10,901
Washburn.....	2,059	2,441
Washington.....	3,840	8,921
Waukesha.....	13,038	17,995
Waupaca.....	3,879	11,495
Waushara.....	1,485	4,675
Winnebago.....	12,841	19,310
Wood.....	6,861	9,569
Totals.....	650,413	674,532

Other party votes 1944: Socialist 13,205; Socialist Labor 1,002; total state vote 1944: 1,349,152.

WYOMING (cont.)

County	1944	
	Dem.	Rep.
Albany.....	3,229	2,970
Big Horn.....	2,314	2,659
Campbell.....	894	1,514
Carbon.....	2,983	2,698
Converse.....	979	1,601
Crook.....	690	1,244
Fremont.....	2,177	3,193
Goshen.....	1,514	2,674
Hot Springs.....	969	877
Johnson.....	756	1,384
Laramie.....	7,542	7,326
Lincoln.....	2,140	1,649
Natrona.....	4,890	5,196
Niobrara.....	826	1,312
Park.....	2,257	2,571
Platte.....	1,544	1,776
Sheridan.....	3,862	3,802
Sublette.....	470	683
Sweetwater.....	5,599	2,623
Teton.....	499	637
Uinta.....	1,754	1,305
Washakie.....	777	1,130
Weston.....	754	1,097
Totals.....	49,419	51,921

The White House

The White House, the name applied both popularly and officially to the residence of the President of the United States, is located on the south side of Pennsylvania Avenue between the Treasury and the State Department buildings. The buildings consisting of the Executive Mansion, East and West terraces, and the Executive Office, together with the grounds cover an area of about sixteen acres.

The site was selected by President Washington and Major L'Enfant, the French engineer who prepared the plan for the Capitol city. The architect was an Irishman, by the name of James Hoban, then a resident of Charleston, S. C. The design of the Mansion proper is said to have been suggested by the Duke of Leinster's Palace in Ireland. The exterior is constructed of light gray sandstone from the quarries of Virginia, which were painted white during the rebuilding in 1815, the building having been fired by the British in 1814.

The White House was the first public building in Washington; the cornerstone was laid on October 13, 1792. However, the Mansion was not occupied until November, 1800, when President and Mrs. John Adams took over occupancy.

The rooms for public functions are located on the first floor, while the second floor is the President's apartments. The most celebrated public room is the East Room, where distinguished guests of the Nation are received and formal receptions take place. The walls of this room are covered with wood paneling and set in the

walls are twelve low relief panels done by the Piccirilli Brothers, noted sculptors who took their ideas from the Aesop Fables. The room is lighted by three massive crystal chandeliers and four bronze standards holding electric lights, which stand in the four corners of the room. From this room the body of President Roosevelt was carried to its last resting place at Hyde Park, N. Y.

Other public rooms are: the Red Room with its hangings of dark red silk damask; the Green Room, with its white marble mantel and curtains of green silk damask; the Blue Room, one of the most beautiful public rooms in America, is elliptical in shape, its wall covering of heavy corded blue silk. In this room the President receives foreign diplomats presenting their credentials. The State Dining Room is used for all formal dinners, the walls are of paneled oak, the ceiling of stucco and the curtains of heavy green velvet, the chandelier is made of silver.

The Executive Office is a three-story structure at the west end of the West Terrace. This was added to the original building in 1902 to accommodate the President's office staff and several additions have been made in recent years. In 1942 with the need of additional office space due to the war, a three-story structure was erected on the East Terrace. This is now the main entrance for the public and for all social functions held in the White House. The President's swimming pool and office are located in the West Wing.

Representatives Under Each Apportionment

Source: The Congressional Directory.

State	Constitutional apportionment	First Census, 1790	Second Census, 1800	Third Census, 1810	Fourth Census, 1820	Fifth Census, 1830	Sixth Census, 1840	Seventh Census, 1850	Eighth Census, 1860	Ninth Census, 1870	Tenth Census, 1880	Eleventh Cen- sus, 1890	Twelfth Census, 1900	Thirteenth Cen- sus, 1910*	Fifteenth Cen- sus, 1930	Sixteenth Cen- sus, 1940
Alabama.....				1	3	5	7	7	6	8	8	9	9	10	9	9
Arizona.....														1	1	2
Arkansas.....						1	1	2	3	4	5	6	7	7	7	7
California.....							2	2	3	4	6	7	8	11	20	23
Colorado.....										1	1	2	3	4	4	4
Connecticut.....	5	7	7	7	6	6	4	4	4	4	4	4	5	5	6	6
Delaware.....	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1
Florida.....							1	1	1	2	2	2	3	4	5	6
Georgia.....	3	2	4	6	7	9	8	8	7	9	10	11	11	12	10	10
Idaho.....											1	1	1	2	2	2
Illinois.....				1	1	3	7	9	14	19	20	22	25	27	27	26
Indiana.....				1	3	7	10	11	13	13	13	13	13	12	11	11
Iowa.....							2	2	6	9	11	11	11	9	8	8
Kansas.....									1	3	7	8	8	7	6	6
Kentucky.....		2	6	10	12	13	10	10	9	10	11	11	11	11	9	9
Louisiana.....				1	3	3	4	4	5	6	6	6	7	8	8	8
Maine.....				7	7	8	7	6	5	5	4	4	4	4	3	3
Maryland.....	6	8	9	9	9	8	6	6	5	6	6	6	6	6	6	6
Massachusetts.....	8	14	17	13	13	12	10	11	10	11	12	13	14	16	15	14
Michigan.....						1	3	4	6	9	11	12	12	13	17	17
Minnesota.....								2	2	3	5	7	9	10	9	9
Mississippi.....				1	1	2	4	5	5	6	7	7	8	8	7	7
Missouri.....					1	2	5	7	9	13	14	15	16	16	13	13
Montana.....											1	1	1	2	2	2
Nebraska.....									1	1	3	6	6	6	5	4
Nevada.....									1	1	1	1	1	1	1	1
New Hampshire.....	3	4	5	6	6	5	4	3	3	3	2	2	2	2	2	2
New Jersey.....	4	5	6	6	6	6	5	5	5	7	7	8	10	12	14	14
New Mexico.....														1	1	2
New York.....	6	10	17	27	34	40	34	33	31	33	34	34	37	43	45	45
North Carolina.....	5	10	12	13	13	13	9	8	7	8	9	9	10	10	11	12
North Dakota.....											1	1	2	3	2	2
Ohio.....			1	6	14	19	21	21	19	20	21	21	21	22	24	23
Oklahoma.....													5	8	9	8
Oregon.....								1	1	1	1	2	2	3	3	4
Pennsylvania.....	8	13	18	23	26	28	24	25	24	27	28	30	32	36	34	33
Rhode Island.....	1	2	2	2	2	2	2	2	2	2	2	2	2	3	2	2
South Carolina.....	5	6	8	9	9	9	7	6	4	5	7	7	7	7	6	6
South Dakota.....											2	2	2	3	2	2
Tennessee.....		1	3	6	9	13	11	10	8	10	10	10	10	10	9	10
Texas.....							2	2	4	6	11	13	16	18	21	21
Vermont.....												1	1	2	2	2
Virginia.....		2	4	6	5	5	4	3	3	3	2	2	2	2	1	1
Washington.....	10	19	22	23	22	21	15	13	11	9	10	10	10	10	9	9
West Virginia.....											1	2	3	5	6	6
Wisconsin.....									3	4	4	5	6	6	6	6
Wyoming.....							2	3	6	8	9	10	11	11	10	10
D.C.....											1	1	1	1	1	1
Total.....	65	106	142	186	213	242	232	237	243	293	332	357	391	435	435	435

*No apportionment was made in 1920.

Note.—The apportionment based on the Sixteenth Census (1940) distributes the 435 seats in the House among the States according to the method of equal proportions. By this method the percent difference between the average number of Representatives per million people in any 2 States is made as small as possible. Also, the percent difference between the average districts, i. e., the average number of persons per representative, in any 2 States is made as small as possible. By equalizing the representation of all pairs of States, the method gives as nearly equal representation as possible to all States in proportion to their population.

Qualifications for Voting in the 48 States

Source: Council on State Governments.

State	Min. length of U. S. citizenship	State	Residence ¹ county	District	Date literacy test adopted	Poll tax ²
Alabama	.....	2 yr.	1 yr.	3 mo.	1900	yes
Arizona	.....	1 yr.	1 mo.	1 mo.	1913	...
Arkansas	.....	1 yr.	6 mo.	1 mo.	.....	yes
California	.....	1 yr.	3 mo.	40 da.	1894	...
Colorado	.....	1 yr.	3 mo.	10 da.	.....	...
Connecticut	5 yr.	1 yr.	.....	6 mo.	1897	...
Delaware	.....	1 yr.	3 mo.	1 mo.	1897	...
Florida	.....	1 yr.	6 mo.	.....	.....	...
Georgia ³	.....	1 yr.	6 mo.	.....	1908	...
Idaho	.....	6 mo.	1 mo.	.....	.....	...
Illinois	.....	1 yr.	3 mo.	1 mo.	.....	...
Indiana	.....	6 mo.	2 mo.	1 mo.	.....	...
Iowa	.....	6 mo.	2 mo.	10 da.	.....	...
Kansas	.....	6 mo.	1 mo.	1 mo.	.....	...
Kentucky	.....	1 yr.	6 mo.	2 mo.	.....	...
Louisiana	.....	2 yr.	1 yr.	3 mo.	1898	...
Maine	6 mo.	6 mo.	3 mo.	3 mo.	1892	...
Maryland	.....	1 yr.	6 mo.	6 mo.	.....	...
Massachusetts	.....	1 yr.	.....	6 mo.	1857	...
Michigan	2½ yr.	6 mo.	.....	20 da.	.....	...
Minnesota	.....	6 mo.	.....	1 mo.	.....	...
Mississippi	.....	2 yr.	.....	1 yr.	1890	yes
Missouri	.....	1 yr.	2 mo.	2 mo.	.....	...
Montana	.....	1 yr.	1 mo.	.....	.....	...
Nebraska	.....	6 mo.	40 da.	10 da.	.....	...
Nevada	.....	6 mo.	1 mo.	10 da.	.....	...
New Hampshire	.....	6 mo.	.....	6 mo.	1902	...
New Jersey	.....	1 yr.	5 mo.	.....	.....	...
New Mexico	.....	1 yr.	3 mo.	1 mo.	.....	...
New York	3 mo.	1 yr.	4 mo.	1 mo.	1921	...
North Carolina	.....	1 yr.	.....	4 mo.	1900	...
North Dakota	.....	1 yr.	3 mo.	1 mo.	1896	...
Ohio	.....	1 yr.	1 mo.	20 da.	.....	...
Oklahoma	.....	1 yr.	6 mo.	1 mo.	1911	...
Oregon	.....	6 mo.	.....	.....	1924	...
Pennsylvania	1 mo.	1 yr.	.....	2 mo.	.....	...
Rhode Island	.....	2 yr.	.....	6 mo.	.....	...
South Carolina ³	.....	2 yr.	1 yr.	4 mo.	1895	yes
South Dakota	5 yr.	1 yr.	3 mo.	1 mo.	.....	...
Tennessee	1 yr.	1 yr.	6 mo.	.....	.....	yes
Texas	1 yr.	1 yr.	6 mo.	6 mo.	.....	yes
Utah	3 mo.	1 yr.	4 mo.	2 mo.	.....	...
Vermont	.....	1 yr.	.....	3 mo.	.....	...
Virginia	1 yr.	1 yr.	6 mo.	1 mo.	1902	yes
Washington	.....	1 yr.	3 mo.	1 mo.	1896	...
West Virginia	.....	1 yr.	2 mo.	.....	.....	...
Wisconsin	.....	1 yr.	.....	10 da.	.....	...
Wyoming	.....	1 yr.	2 mo.	10 da.	1889	...

¹Registration is required in all states except Arkansas and North Dakota.

²Although poll or head taxes are levied in several other states, those listed here make payment of the tax a condition for voting.

³Georgia and South Carolina's minimum voting age is 18. In all other states the minimum age is 21

States Having Literacy Tests

(with date of adoption)

Alabama	1900	Maine	1892	Oklahoma	1911
Arizona	1913	Massachusetts	1857	Oregon	1924
California	1894	Mississippi	1890	South Carolina	1895
Connecticut	1897	New Hampshire	1902	Virginia	1902
Delaware	1897	New York	1921	Washington	1896
Georgia	1908	North Carolina	1900	Wyoming	1889
Louisiana	1898	North Dakota	1896		

Note: In 1924, Congress enacted a law giving citizenship to all native-born Indians.

Primary Elections for State Officers

Source: Council of State Governments.

State	Mandatory or optional	1946 Primary	Party member- ship	Nonpartisan primaries
Alabama	M	June 4	Closed	.....
Arizona	M	Sept. 10	Closed	.....
Arkansas	O	Aug. 13	Closed	School directors
California	M	June 4	Closed	Judges, school, county, township and city offices
Colorado	M	Sept. 12	Closed	.....
Connecticut	No primary	.....	.....	.....
Delaware	O	*	Closed	.....
Florida	M	May 7	Closed	.....
Georgia	O	July 16	Closed	.....
Idaho	M	June 11	Closed	Judges
Illinois	M	April 9	Closed	.....
Indiana	M	May 7	Closed	.....
Iowa	M	June 3	Closed	.....
Kansas	M	Aug. 6	Closed	.....
Kentucky	M	Aug. 2	Closed	.....
Louisiana	M	Sept. 10	Closed	.....
Maine	M	June 17	Closed	.....
Maryland	M	June 24	Closed	Judges
Massachusetts	M	Sept. 17	Closed	.....
Michigan	M	Sept. 10	Closed	.....
Minnesota	M	July 8	Open	Members of legislature
Mississippi	M	July 3	Closed	.....
Missouri	M	Aug. 1	Closed	.....
Montana	M	July 16	Open	Supreme court justices
Nebraska	M	June 11	Closed	County judge and county superin- tendent, district judges of su- preme court, state superinten- dent of public instruction, mem- bers of legislature
Nevada	M	Sept. 3	Closed	Judicial and school offices
New Hampshire	M	Aug. 4	Closed	.....
New Jersey	M	June 12	Closed	.....
New Mexico	M	June 4	Closed	.....
New York	M	Sept. 17	Closed	.....
North Carolina	M	May 27	Closed	.....
North Dakota	M	June 25	Open	Judicial offices, state superintend- ent of schools, tax commissioner, all city offices
Ohio	M	May 7	Closed	Judicial candidates and members of board of education
Oklahoma	M	July 23	Closed	.....
Oregon	M	May 17	Closed	Judges, city superintendent of schools, superintendent of pub- lic instruction
Pennsylvania	M	April 25	Closed	.....
Rhode Island	No primary	.....	.....	.....
South Carolina	O	July 30	Closed	.....
South Dakota	M	May 2	Open	Judges and state superintendent of public instruction
Tennessee	M	Aug. 1	Closed	None
Texas	M	July 27	Closed	.....
Utah	M	July 9	Open	.....
Vermont	M	Aug. 13	Open	All elective offices
Virginia	O	Aug. 7	Closed	.....
Washington	M	July 9	Closed	Supreme and superior court judges, supt. of public instruction
West Virginia	M	May 9	Closed	City boards of education
Wisconsin	M	Sept. 19	Open	Certain judges and school board members
Wyoming	M	Aug. 20	Closed	Superintendent and district court judges, county supt. of schools
.....	Optional	.....	.....	.....

U. S. National Conventions

Date	Party	Where held	Nominated	Vote
June 17, 1856	R	Philadelphia	John C. Fremont	359
June 2, 1856	D	Cincinnati	James Buchanan	296
May 16, 1860	R	Chicago	Abraham Lincoln	281½
April 23, 1860	D	Charleston, adj. to Balt.	S. A. Douglas	181
June 7, 1864	R	Baltimore	Abraham Lincoln	Unanimous
Aug. 29, 1864	D	Chicago	Geo. B. McClellan	202½
May 28, 1868	R	Chicago	U. S. Grant	Unanimous
July 4, 1868	D	New York City	Horatio Seymour	Unanimous
June 5, 1872	R	Philadelphia	U. S. Grant	Unanimous
June 9, 1872	D	Baltimore	Horace Greeley	688
June 16, 1876	R	Cincinnati	R. B. Hayes	384
June 28, 1876	D	St. Louis	S. J. Tilden	508
June 7, 1880	R	Chicago	J. A. Garfield	399
June 23, 1880	D	Cincinnati	W. S. Hancock	705
June 6, 1884	R	Chicago	J. G. Blaine	541
July 11, 1884	D	Chicago	Grover Cleveland	683
June 23, 1888	R	Chicago	Benjamin Harrison	544
June 6, 1888	D	St. Louis	Grover Cleveland	By acclamation
June 7, 1892	R	Minneapolis	Benjamin Harrison	535½
June 21, 1892	D	Chicago	Grover Cleveland	617½
June 16, 1896	R	St. Louis	William McKinley	661½
July 7, 1896	D	Chicago	William J. Bryan	500
June 19, 1900	R	Philadelphia	William McKinley	Unanimous
July 4, 1900	D	Kansas City	William J. Bryan	By acclamation
June 21, 1904	R	Chicago	Theodore Roosevelt	Unanimous
July 6, 1904	D	St. Louis	Alton B. Parker	678
June 16, 1908	R	Chicago	William H. Taft	702
July 7, 1908	D	Denver	William J. Bryan	892½
June 18, 1912	R	Chicago	William H. Taft	561
June 25, 1912	D	Baltimore	Woodrow Wilson	990
June 9, 1916	R	Chicago	Charles E. Hughes	949½
June 14, 1916	D	St. Louis	Woodrow Wilson	By acclamation
June 8, 1920	R	Chicago	Warren G. Harding	692½
June 28, 1920	D	San Francisco	James M. Cox	732½
June 10, 1924	R	Cleveland	Calvin Coolidge	1,065
June 24, 1924*	D	New York City	John W. Davis	839†
June 12, 1928	R	Kansas City	Herbert Hoover	837
June 26, 1928	D	Houston	Alfred E. Smith	849½
June 14, 1932	R	Chicago	Herbert Hoover	1,126½
June 27, 1932	D	Chicago	F. D. Roosevelt	945
June 9, 1936	R	Cleveland	Alfred M. Landon	984
June 23, 1936	D	Philadelphia	F. D. Roosevelt	By acclamation
June 24, 1940	R	Philadelphia	Wendell L. Willkie	Unanimous
June 15, 1940	D	Chicago	F. D. Roosevelt	Unanimous
June 26, 1944	R	Chicago	Thomas E. Dewey	1,056-1
July 19, 1944	D	Chicago	F. D. Roosevelt	1,086-90

*In session until July 10, 1924.

†Nominated on 103d ballot.

February 3

Horace Greeley was a writing gent
And in '72 ran for President,
Though he should have told himself, "I
can't

Possibly beat Ulysses S. Grant."
Horace Greeley perhaps is best
Known for saying "Young man, go West."
And nobody is much astounded
That the New York Tribune was what he
founded.

—F. P. A.

Counterfeiters cheated the American
Public out of only \$48,000 in 1942, com-
pared with spoils of \$771,000 per year be-
tween 1933 and 1936. A counterfeit bill can
often be detected by comparing it with a
genuine bill of the same denomination,
paying special attention to the quality of
the portrait, which is unusually fine in a
genuine bill. Counterfeit coins usually feel
greasy or slippery.—*Encyc. Brit.*

Speakers of the House of Representatives, 1789 to 1946

Source: *The Congressional Directory.*

Name	State	Congress	Dates served
F. A. Muhlenberg	Pennsylvania	1st	1789-1791
Jonathan Trumbull	Connecticut	2d	1791-1793
F. A. Muhlenberg	Pennsylvania	3d	1793-1795
Jonathan Dayton	New Jersey	4th and 5th	1795-1799
Theodore Sedgwick	Massachusetts	6th	1799-1801
Nathaniel Macon	North Carolina	7th, 8th, and 9th	1801-1807
Joseph B. Varnum	Massachusetts	10th and 11th	1807-1811
Henry Clay	Kentucky	12th and 13th	1811-1814
Langdon Cheves	South Carolina	13th	1814-1815
Henry Clay	Kentucky	14th, 15th, and 16th	1815-1820
John W. Taylor	New York	16th	1820-1821
Philip P. Barbour	Virginia	17th	1821-1823
Henry Clay	Kentucky	18th	1823-1825
John W. Taylor	New York	19th	1825-1827
Andrew Stevenson	Virginia	20th, 21st, 22d, and 23d	1827-1834
John Bell	Tennessee	23d	1834-1835
James K. Polk	Tennessee	24th and 25th	1835-1839
Robert M. T. Hunter	Virginia	26th	1839-1841
John White	Kentucky	27th	1841-1843
John W. Jones	Virginia	28th	1843-1845
John W. Davis	Indiana	29th	1845-1847
Robert C. Winthrop	Massachusetts	30th	1847-1849
Howell Cobb	Georgia	31st	1849-1851
John Boyd	Kentucky	32d and 33d	1851-1855
Nathaniel P. Banks	Massachusetts	34th	1856-1857
James L. Orr	South Carolina	35th	1857-1859
William Pennington	New Jersey	36th	1860-1861
Salustia A. Grow	Pennsylvania	37th	1861-1863
Schuyler Colfax	Indiana	38th, 39th, and 40th	1863-1869
James G. Blaine	Maine	41st, 42d, and 43d	1869-1875
Michael C. Kerr	Indiana	44th	1875-1876
Samuel J. Randall	Pennsylvania	44th, 45th, and 46th	1876-1881
Joseph W. Keifer	Ohio	47th	1881-1883
John G. Carlisle	Kentucky	48th, 49th, and 50th	1883-1889
Thomas B. Reed	Maine	51st	1889-1891
Charles F. Crisp	Georgia	52d and 53d	1891-1895
Thomas B. Reed	Maine	54th and 55th	1895-1899
David B. Henderson	Iowa	56th and 57th	1899-1903
Joseph G. Cannon	Illinois	58th, 59th, 60th, and 61st	1903-1911
Champ Clark	Missouri	62d, 63d, 64th, and 65th	1911-1919
Federick H. Gillett	Massachusetts	66th, 67th, and 68th	1919-1924
Nicholas Longworth	Ohio	69th, 70th, and 71st	1925-1931
John N. Garner	Texas	72d	1931-1933
Henry T. Rainey	Illinois	73d	1933-1934
Joseph W. Byrns	Tennessee	74th	1935-1936
William B. Bankhead	Alabama	74th, 75th, and 76th	1936-1940
Sam Rayburn	Texas	77th, 78th, and 79th	1941-1946
Joseph W. Martin, Jr.	Massachusetts	80th	1947-

Make-up of Congress

The Senate

Number—Ninety-six, two from each state.

Term—Six years; one-third of the membership is elected each two years.

Eligibility—Any person who is thirty years of age or more and has been a citizen of the United States for nine years can be elected to the Senate.

Salary—\$12,500 annually, plus \$2,500 expense allowance.

Term—Two years, the term of all members beginning and ending concurrently.

Eligibility—Any person who is twenty-five years of age or over and has been a citizen of the United States for seven years can be elected to the House.

Salary—\$12,500 annually, plus \$2,500 expense allowance; \$20,000 annually for the Speaker.

Sessions of Congress

House of Representatives

Number—435 members. Puerto Rico, Hawaii and Alaska each have one territorial delegate, who has no vote.

Each Congress begins on January 3 of the odd years and continues for two years. Special sessions are at the call of the President.

The Forty-eight States

Source: "Information, Please" questionnaire to state historians.

Origin of state name	Area, sq. mi.	Area rank	Population	Pop'n. rank	Date and rank of admission	Nickname	Flower	Motto	
ALABAMA, from "Alibama," an Indian Mus-shogean tribe.	51,078	28	2,818,083	17	Dec. 14, 1819	23	Cotton State.....	Goldenrod.....	We dare defend our rights
ARIZONA, from "Arida-Zona," meaning "dry area."	113,956	5	638,412	43	Feb. 14, 1912	48	Grand Canyon State.	Saguaro cactus....	Ditat deus (God enriches)
ARKANSAS, from "Algonkin," a tribe of Quapaw Indians.	53,335	25	1,776,446	24	June 15, 1836	25	Wonder State.....	Apple blossom....	Regnat Populus (The people rule)
CALIFORNIA, from "Aixto es calor de forne de formalia," meaning "Land of the oven's heat."	158,693	2	8,746,989	5	Sept. 9, 1849	31	Golden State.....	Golden poppy....	Eureka (I have found it)
COLORADO, from the Spanish meaning "red."	103,948	7	1,147,259	33	Aug. 1, 1876	38	Centennial State....	Rocky Mt. columbine.	Nil Sine Numine (Nothing without the Deity)
CONNECTICUT, from Indian name "Quonectacut," meaning "Long River, or River of Pines."	5,004	46	1,776,807	31	Jan. 9, 1788	5	Constitution State...	Mountain laurel...	Qui Transiit Sustinet (Hewhotransplanted continues to sustain)
DELAWARE, in honor of Lord De La Warr	2,370	47	283,802	46	Dec. 7, 1787	1	Diamond State.....	Peach blossom....	Liberty and Independence
FLORIDA, from the Spanish, meaning "feast of flowers."	58,666	21	2,367,217	27	March 3, 1845	27	Peninsula State.....	Orange blossom...	In God we trust
GEORGIA, in honor of King George II of England.	59,265	20	3,223,727	14	Jan. 2, 1788	4	Cracker State.....	Cherokee rose....	Wisdom, justice, moderation
IDAHO, from the Indian name "Edah hoe," meaning "Light on the Mountains."	83,888	12	531,573	42	July 3, 1890	43	Gem State.....	Syringa.....	Esta Perpetua (Thou Forever)
ILLINOIS, from the Indian name "Iliniwek" meaning "the river of men."	56,400	23	7,729,720	3	Dec. 3, 1818	22	Prairie State.....	Native violet.....	State sovereignty — National union
INDIANA, from the word "Indian."	36,555	37	3,419,707	12	Dec. 11, 1816	20	Hoosier State.....	Zinnia.....	Crossroads of America
IOWA, from the Sioux tribe of "Alaouas."	56,280	24	2,269,759	20	Dec. 28, 1846	29	Hawkeye State.....	Wild rose.....	Our liberties we prize and our rights we will maintain
KANSAS, from the name of a Sioux tribe.	82,153	13	1,774,447	29	Jan. 29, 1861	34	Sunflower State....	Sunflower.....	Ad astra per aspera (To stars through difficulties)
KENTUCKY, from the Indian name "ken-tah-ten," meaning "land of tomorrow."	40,598	36	2,630,194	16	June 1, 1792	15	Bluegrass State....	Goldenrod.....	United we stand, divided we fall
LOUISIANA, in honor of King Louis XIV of France.	48,506	30	2,535,385	21	April 8, 1812	18	Pelican State.....	Magnolia.....	Union, justice, and confidence
MAINE, from the French province of "Maine."	33,040	38	793,600	35	March 15, 1820	24	Pine Tree State....	Pine cone and tassel.	Dirigo (I guide)
MARYLAND, in honor of Queen Maria of England.	12,327	41	2,127,874	28	April 28, 1788	7	Old Line State.....	Black-eyed Susan.	Scuto bonae voluntatis tueae coronasti nos. (With the shield of Thy good will Thou hast covered us)

7,839	44	4,162,815	8	Feb. 6, 1788	6	Bay State.....	Mayflower	Ense petit placidam sub libertate quietem (By the sword we seek peace, but peace only under liberty)
MASSACHUSETTS, from the Indian, #Massachusetts-et," meaning "great hill, small place."	22	5,429,641	7	Jan. 26, 1837	26	Wolverine State.....	Apple blossom...	Si quaeris peninsulam amoenam circumspice (If you seek a pleasant peninsula, look around you)
MICHIGAN, from the Indian name "Michigama," meaning "great water."	57,980							L'étoile du nord (Star of the north)
MINNESOTA, from the Sioux, meaning "sky-colored water."	84,286	2,508,663	18	May 11, 1858	32	Gopher State.....	Moccasin flower..	Virgute et armis (By valor and arms)
MISSISSIPPI, from the Algonquin "Maas-sipa" meaning "fish river."	46,865	2,175,877	23	Dec. 10, 1817	21	Magnolia State.....	Magnolia.....	Salus populi suprema lex esto (Let the welfare of the people be the supreme law)
MISSOURI, from the name of an Indian Sioux tribe.	69,420	3,589,538	10	Aug. 10, 1821	19	Show-me State.....	Hawthorn.....	Oro y plata (Gold and silver)
MONTANA, from the Spanish meaning "mountains."	146,997	464,999	39	Nov. 8, 1889	41	Treasure State.....	Bitterroot.....	Equality before the law
NEBRASKA, from the language of the Omaha Indians, meaning "wide river."	77,510	1,213,792	32	March 1, 1867	37	Cornhusker State....	Goldenrod.....	All for our country
NEVADA, from the Spanish meaning "snow-clad."	110,690	156,445	48	Oct. 31, 1864	36	Sagebrush State.....	Sagebrush.....	Live free or die
NEW HAMPSHIRE, from the English county of Hampshire.	9,210	457,231	44	June 21, 1788	9	Granite State.....	Purple lilac.....	Liberty and prosperity
NEW JERSEY, from the Channel Island of Jersey.	8,224	4,167,840	9	Dec. 18, 1787	3	Garden State.....	Violet.....	Crescit eundo (It grows as it goes)
NEW MEXICO, from the Aztec Indian word "mexitli," their national war god.	122,634	532,212	41	Jan. 6, 1912	47	Sunshine State.....	Yucca flower.....	Excelsior (Higher)
NEW YORK, in honor of the English Duke of York.	49,576	12,632,890	1	July 26, 1788	11	Empire State.....	Rose.....	Esse quam videri (To be rather than to seem)
NORTH CAROLINA, in honor of King Charles I of England.	52,426	3,534,545	11	Nov. 21, 1789	12	Tarheel State.....	Dogwood.....	Liberty and union, now and forever, one and inseparable
NORTH DAKOTA, from the Sioux Indian, meaning "friends."	70,837	528,071	38	Nov. 2, 1889	39	Sioux State.....	Wild prairie rose..	(None)
OHIO, from the Iroquois, denoting "great."	41,122	6,836,667	4	Feb. 19, 1803	17	Buckeye State.....	Scarlet carnation..	Labor omnia vincit (Labor conquers all things)
OKLAHOMA, from the language of the Choctaw Indian, meaning "red people."	70,057	2,064,679	22	Nov. 16, 1907	46	Sooner State.....	Mistletoe.....	The union
OREGON, from the Spanish word "Orejon," meaning "big-eared (Indian) men."	96,981	1,214,226	34	Feb. 14, 1859	33	Beaver State.....	Oregon grape.....	Virtue, liberty, and independence
PENNSYLVANIA, in honor of William Penn.	45,333	9,247,088	2	Dec. 12, 1787	2	Keystone State.....	Mountain laurel..	

THE FORTY-EIGHT STATES—(cont.)

Origin of state name	Area, sq. mi.	Area rank	Pop'n.	Population rank	Date and rank of admission	Nickname	Flower	Motto
RHODE ISLAND, from the original name, Isles of Rhodes.	1,300	48	778,972	36	May 29, 1790	13	Little Rhody	Hope
SOUTH CAROLINA, in honor of King Charles I of England.	30,989	39	1,923,354	27	May 23, 1788	8	Palmetto State	Animis opibusque parati. (Ready in soul and resources)
SOUTH DAKOTA, from the Sioux Indian meaning "friends."	77,615	15	558,629	37	Nov. 2, 1889	40	Coyote State	Under God the people rule
TENNESSEE, from the Cherokee Indian name "Tennessee."	42,246	34	2,870,158	15	June 1, 1796	16	Volunteer State	Agriculture and commerce
TEXAS, from an Indian word, "Tejas," meaning "Friends."	265,896	1	6,876,248	6	Dec. 29, 1845	28	Lone Star State	Friendship
UTAH, from the name of an Indian tribe, the Utes.	84,990	10	606,994	40	Jan. 4, 1896	45	Beehive State	Industry
VERMONT, from the French meaning "green mountains."	9,564	42	310,941	45	March 4, 1791	14	Green Mountain State	Freedom and unity
VIRGINIA, in honor of the "Virgin" Queen Elizabeth.	39,899	33	3,199,115	19	June 25, 1788	10	The Old Dominion	Sic semper tyrannis (Thus ever to tyrants)
WASHINGTON, in honor of the first president of the U. S.	69,127	19	2,055,378	30	Nov. 11, 1889	42	Evergreen State	Alki (Chinook dialect) (By and By)
WEST VIRGINIA, in honor of the "Virgin" Queen Elizabeth.	24,282	40	1,715,984	35	June 20, 1863	35	Panhandle State	Montani semper liberi (Mountaineers are always freemen)
WISCONSIN, from the French corruption of Indian word "Ouisconsin," meaning "meeting of rivers."	56,066	25	2,975,910	25	May 29, 1848	30	Badger State	Forward
WYOMING, to perpetuate the Pennsylvania valley "Wyoming."	97,914	8	257,108	47	July 10, 1890	44	Equality State	Cedant arma togae (Let arms yield to the gown)

State Capitals

Alabama	Montgomery	Iowa	Des Moines	Nebraska	Lincoln	Rhode Island	Providence
Arizona	Phoenix	Kansas	Topeka	Nevada	Carson City	South Carolina	Columbia
Arkansas	Little Rock	Kentucky	Frankfort	New Hampshire	Concord	South Dakota	Pierre
California	Sacramento	Louisiana	Baton Rouge	New Jersey	Trenton	Tennessee	Nashville
Colorado	Denver	Maine	Augusta	New Mexico	Santa Fé	Texas	Austin
Connecticut	Hartford	Maryland	Annapolis	New York	Albany	Utah	Salt Lake City
Delaware	Dover	Massachusetts	Boston	North Carolina	Raleigh	Vermont	Montpelier
Florida	Tallahassee	Michigan	Lansing	North Dakota	Bismarck	Virginia	Richmond
Georgia	Atlanta	Minnesota	St. Paul	Ohio	Columbus	Washington	Olympia
Idaho	Boise	Mississippi	Jackson	Oklahoma	Oklahoma City	West Virginia	Charleston
Illinois	Springfield	Missouri	Jefferson City	Oregon	Salem	Wisconsin	Madison
Indiana	Indianapolis	Montana	Helena	Pennsylvania	Harrisburg	Wyoming	Cheyenne

STATES AND TERRITORIES

BY JOHN G. ROGERS

THE FORTY-EIGHT STATES

Alabama

Alabama ranks fourth in cotton growing but cotton has not been king there for many years. The state is the biggest heavy industry state in the South. It ranks third in iron mining, fourth in lumbering and eighth in coal mining. Cotton goods, iron and steel and saw mill products lead Alabama's manufacturing which is centered in the 541 mills, mines and factories in and around Birmingham, "the Pittsburgh of the South." This city of more than 270,000 population did not even exist in 1870.

Alabama grows more nuts than any state except Georgia, and is high in corn, hay and sweet potatoes. Montgomery, the capital, is a U. S. leader in making commercial fertilizer. Mobile, the only seaport of consequence, is a busy shipper of raw cotton, iron and steel, and hardwood lumber from the slopes of the Alleghenies.

Alabama's Negro population, just under a million, is the third largest in the Union. At Tuskegee Institute, founded by Booker T. Washington, Dr. George Washington Carver carried out his famed agricultural research. Muscle Shoals, on the Tennessee River, provides a great electric power resource.

Hernando De Soto and his treasure seekers first saw Alabama in 1540. Subsequently it was under French, British and Spanish ownership. The Confederacy was founded at Montgomery in February of 1861, and for a time the city was the Confederate capital. Alabama is consistently Democratic in politics.

Arizona

Mining leads the industries of Arizona which ranks first in copper, second in gold, third in vanadium and fourth in silver. The smelting and refining of copper is far and away the state's principal manufacturing activity. Irrigation—only three states spend more on artificial watering than Arizona—is vital to its agriculture. In land once arid and useless, the state grows cotton, corn, wheat, sorghums, citrus fruit and vegetables. Expanded irrigation promises much for Arizona where crops grow so quickly that alfalfa can be cut four to seven times a year.

Phoenix, the capital and largest city, is both a popular health resort, and a busy shipper of cotton and vegetables. Tucson, too, is a vegetable shipper, and Douglas exports copper and loads cattle off to market centers. Spaniards in the sixteenth

century were the first white men to breathe the dry, bracing air of Arizona, to look over its mountains, deserts, canyons and valleys.

With the Hopi, Navajo and Apache tribes, Arizona has the second largest U. S. Indian population. It also has some of the country's most famous scenery. In the north is the Grand Canyon of the Colorado River, with a magnificent breadth of from four to eighteen miles, rich not only for beauty but also for geological records many hundreds of centuries old. In the east is the Petrified Forest—pine and cedar trees turned to stone by the action of mineral-laden waters. Entering on Feb. 14, 1912, Arizona was the last state to join the Union. In politics, Democrats have prevailed by a two-to-one margin.

Arkansas

About 90 percent of the nation's bauxite—the source of aluminum—comes from the earth of Arkansas which also contains North America's only known diamond mine and a versatile set of hot mineral springs owned and operated by the Federal government. Mostly flat with the Ozark Mountains rising in the west, Arkansas has an equable southern climate and fertile central valleys in which crops mature three to four weeks ahead of schedule. The state ranks third in growing cotton and rice, also raises wheat, corn, oats, potatoes and fruit. It stands eighth in oil production, and eighth in lumbering, with hardwoods the principal output. Arkansas is first in producing whetstones and antimony ore.

Little Rock, the capital and largest city, stands in the bauxite country, and is a processor of cotton seed and lumber. Pine Bluff has one of the biggest U.S. archery factories and is a busy cotton shipper. Fort Smith handles cotton and makes glass and furniture. Hot Springs, with only about 20,000 population, entertains 300,000 guests a year. Its forty-seven famous mineral springs, the only ones administered by the Federal government, are in Hot Springs National Park in the Ouachita Mountains. The curative waters range from 95 to 147 degrees in temperature and once were fiercely contested for by Indian tribes which believed that the Great Spirit was distilled therein. Hernando De Soto, probably the first white man to see Arkansas, explored the area in 1541. In politics, the state is consistently Democratic.

California

California, celebrated for cinema and sunshine and stretched along nearly two-thirds of the U. S. Pacific Coast, is one of the nation's economic giants. It collects more money from raising food and catching fish than any other state, and it stands second in oil production, third in lumbering and seventh in manufacturing. Irrigation, in which California leads the country, makes possible the big crop harvest consisting of virtually every kind of fruit and vegetable, and corn, wheat, sugar beets, walnuts and almonds. Cotton growing is increasing. California stands first in growing grapes and in making wines and brandies.

Ranging from a sub-tropical south to a temperate north with snow-capped mountains, California is broken lengthwise by the Coast and Sierra Nevada Mountain Ranges, with the fertile San Joaquin and Sacramento Valleys lying between. Nature is spectacular in California. Death Valley, toward the southeast, is 276 feet below sea level, the lowest spot in the nation. Seventy miles to the north is Mt. Whitney, a 14,496-foot peak, the highest point in the United States. California's Lassen Peak is the only active U. S. volcano, and one of the state's giant redwoods, the General Sherman Tree in Sequoia National Park, is estimated to be 3,500 years old.

Juan Rodriguez Cabrillo, a Spanish explorer, in 1542, was probably the first white man to touch California. The state's settlement boom began in 1849, a year after gold was discovered at Sutter's Mill on the American River. In the next twenty years about a billion dollars in gold was mined. Gold is still found in California but the most important mineral products are oil, natural gas, sand and gravel, lead, tin and cement, in all of which the state ranks very high.

Los Angeles, the fifth largest U. S. city and tenth busiest U. S. airport, makes furniture, autos, clothing, tires and oil products. Hollywood, part of Los Angeles, is the motion picture capital of the world. San Francisco, the eighteenth U. S. seaport, refines oil, builds ships, packs meat and cans vegetables, and also makes tin and steel products. San Diego and Long Beach are big plane-making centers. Sacramento, the capital, cans fruit and vegetables. Berkeley makes soap, ink, engines, pumps and fertilizer. Pasadena is the famed home of the annual Tournament of Roses at New Year's time.

California's four national parks are great tourist attractions and the San Francisco-Oakland and Golden Gate Bridges are among the world's engineering marvels. The state is second to Texas in

railroad mileage. In politics, California fluctuates between Democrats and Republicans.

Colorado

Colorado, the most elevated state in the nation, began settlement with a gold rush near Denver in 1858, but for about the last thirty years the state has been predominantly agricultural. Wheat, hay, beans, sugar beets, corn, potatoes, barley and truck vegetables head the crop list. In the West, only California and Washington surpass Colorado in crop value. In the nation, only California surpasses Colorado in irrigation investment. The state's coal reserves are seventh greatest. Gold and silver still are mined, and the state leads in extracting vanadium and molybdenum.

Denver, the capital, is the financial and commercial capital of the Rocky Mountain region, with no other large city for 500 miles in any direction. It is the fourth U. S. insurance center and has the world's largest sheep market. Pueblo, "the Pittsburgh of the West," makes iron, steel, brick, tile and foundry products. Greeley has flour and beet sugar mills. Colorado Springs, perhaps the most popular tourist center in the Rocky Mountains, lies near Pikes Peak, the Garden of the Gods and the Cave of the Winds. From its eastern plains area, Colorado climbs westward to many peaks over 14,000 feet. Mount Evans Highway is the highest auto road in the world, and 1,053 feet over the Royal Gorge of the Arkansas River is the highest suspension bridge in the world. The state ranks fifth in national forest area. In politics, Colorado shifts between Republicans and Democrats.

Connecticut

For its early brilliance in turning out firearms and ammunition, Connecticut won the title of "Arsenal of the Nation." And from gun making, with accurate measurement a prime factor, the state went on to develop the U. S. leadership in mass production in precision manufacturing. Though Connecticut is 46th in size, 31st in population, it ranks fourteenth in manufacturing and contains two of the nation's first twenty-two industrial areas.

Connecticut's main cities and a few of their main products: Bridgeport—arms, ammunition, sewing machines, airplanes; Hartford, the capital—arms, typewriters, plane motors; New Britain—hardware, cutlery, edged tools; New Haven—arms, ammunition, hardware, clocks; Stamford—locks, typewriters, pottery, machinery; Waterbury—brass products, in which it leads the nation; and Danbury—hats.

Hartford, which has the oldest U. S. newspaper, "The Courant," established in 1764, is the insurance capital of the na-

ion. Every day its companies receive a total of \$2,000,000 in cash premiums.

Hilly in the east and west, with a broad central plain, Connecticut devotes its farming mainly to dairying, fruit growing and poultry raising. It stands ninth in tobacco growing and no crop in the nation receives as high a price per acre as Connecticut shade-grown tobacco. Truck gardening is extensive.

Connecticut is a popular resort state, both for its beaches on Long Island Sound and for its inland lakes and forested hills. The southwest part of the state is a suburban area of New York City. Dutch traders from Manhattan began the settlement of Connecticut near Hartford in 1633, and later the English came in from Massachusetts. Their constitution, the Fundamental Orders of 1639, is probably the first written democratic charter. In Connecticut politics, Republicans have held a slight edge.

Delaware

Little Delaware, smuggling against Delaware Bay at the lowest mean elevation of any state, grows a great variety of small fruit and vegetables and is a U. S. pioneer in the industry of food canning. One of the country's oldest and largest canneries is at Dover, the capital. Peaches, strawberries, apples, corn, wheat, hay and truck vegetables are the leading crops. Fishing in the bay and in the Atlantic Ocean is an important industry. Delaware's chicken farms are one of the great supply sources for the big markets of the East.

Wilmington, the home of E. I. du Pont Nemours & Company, has about half the state's population, does about two-thirds of its manufacturing, including chemicals, leather goods, machine products, hardware, textiles and ships. The first U. S. iron steamship was built on its ways in 1836.

Henry Hudson discovered Delaware Bay in 1609, and the Dutch started settlement in the area in 1631. After the Indians wiped out the Dutch, Delaware was under the Swedish flag for a time. Kaolin clay, mined in the north, is the state's only mineral of consequence. Under a law of 1711, Delaware still maintains the whipping post as punishment for some crimes. Democrats and Republicans give and take with about equal success in Delaware.

Florida

Agriculture is Florida's biggest steady pursuit, but hotel statistics point the way to its chief fame—the resort and tourist business. Though only middling in size and population, Florida has 848 hotels, a number exceeded only by New York and California. Along its 1,416-mile coast line, the longest of any state, dozens

of communities more than double in population during the winter season when northerners flee the snow and cold.

Oranges and grapefruit lead Florida's crop list, then come tomatoes, peanuts, corn, celery and potatoes. The state's truck gardens are early and large suppliers of northern tables. Florida is tenth in commercial fishing. Deep sea fishing for sport is a leading tourist hobby. Florida is the U. S. leader in mining and shipping phosphate rock.

Florida's low elevation, second lowest among states, is dotted by some 30,000 small lakes, and the dismal Everglades swamp in the south. Tallahassee, the capital, at 216 feet, is a high place in Florida. Tampa is one of the largest cigar manufacturers, Miami is a busy fruit shipper. Jacksonville ships lumber and turpentine, two of the state's leading products. St. Petersburg has long been popular as a winter resort. Ponce de Leon first saw Florida in 1513, seeking the Fountain of Youth. St. Augustine, founded by Spaniards in 1565, was America's first city of European origin. Florida is consistently Democratic in politics.

Georgia

Georgia, the largest state east of the Mississippi, is typical of the changing South. The value of its factory products has overhauled and passed the value of its farm products, and industrialization is ever increasing. Atlanta, the capital, largest city and the leading commercial and financial center of the Southeast, is achieving importance as an automobile maker. Cotton and lumber products, fertilizer, processed food and a great variety of other items are among the factory output of Macon, Augusta and Savannah.

Georgia ranks first in sea island cotton, sixth in all cotton and sixth in tobacco. It is first in peanuts and pecans and grows four times as many commercial nuts as any other state. Georgia's peaches are nationally famous. Georgia is fifth in lumbering. From its vast stands of pine come more than half of all U. S. resin and turpentine, and Savannah is the world's biggest market for naval stores. Second in the mining of mica, the state is one of the U. S. leaders in the value of its clay products. Cattle grazing is extensive. Georgia marble is widely exported.

Hernando De Soto, a Spaniard, in 1540 first looked over the red clay of Georgia, sloping upward to the Blue Ridge Mountains in the north and northwest. James Oglethorpe began settlement in 1732, founding a British colony as a refuge for debtors and seekers of religious freedom. Sherman burned Atlanta and devastated a great slice of Georgia in the Civil War.

At Warm Springs is the infantile paralysis foundation founded by President Franklin D. Roosevelt who died there on April 12, 1945. Georgia is consistently Democratic in politics.

Idaho

Idaho's huge investment in irrigation—the third largest in the nation—has put its agriculture well ahead of its mining. Idaho potatoes are eaten everywhere. Near Mesa is the world's largest individually-owned fruit orchard. The state ships more apples than any state except Washington, and grows many other fruits, wheat, corn and barley. Boise, Pocatello, Idaho Falls, Nampa and Twin Falls—all are busy shippers of produce, meat and wool. There is light diversified manufacturing and Pocatello has a cheese factory with a world market.

Lewis and Clark visited Idaho in 1805, but real settlement began with the gold strike of 1860. Idaho mines gold, silver, lead, zinc, copper and tungsten, and still has vast undeveloped mineral wealth. In its rugged central mountains is an area several times the size of Switzerland that is reachable only by pack horse. Until a few years ago it was impossible to motor between north and south Idaho without detouring through Oregon and Washington.

Tourist trade is important to the state. Hunting and fishing are excellent. Sun Valley is a famed winter resort. Shoshone Falls on the Snake River is forty-six feet higher than Niagara, and Hells Canyon of the Snake is much deeper than the Grand Canyon. Boise has recorded the highest U. S. temperature—121 degrees above zero. Politically, Idaho switches back and forth, with Democrats holding a slight edge.

Illinois

Illinois anchors the Midwest like a rich giant, versatile in every big wealth-making industry. It stands third in manufacturing, third in coal mining, fourth in farm cash income, sixth in oil production. The sprawling Chicago district (including a slice of Indiana) is a close second to Pittsburgh's area in iron and steel production. Chicago, proper, leads the nation as a meat packer and grain exchange, is the second city in commerce, manufacturing and population.

Transportation alone makes Illinois stand out. Chicago is the largest U. S. rail center, the busiest long-flight airport city, the fourth busiest Great Lakes port. The state as a whole is third to California and Texas in railroad track mileage. The Wabash, Ohio and Mississippi Rivers are much used water routes.

As a farmer, Illinois stands first in soy beans, second in corn, third in oats. Its fertile flatness—it is the third most level state—also grows wheat, barley, rye, potatoes, hay and truck vegetables. It is near the top in hog raising, and dairying is an important industry. Bituminous coal underlies more than half the state, which leads in production of peat. Prospectors still are finding new oil pools to tap. The Illinois sand and gravel business is exceeded only by that of California. Fluorspar, iron ore and primary zinc also are mined.

Illinois manufactures just about everything. Besides packing meat and forging steel, Chicago makes railroad cars, clothing and a host of other products. Rockford makes furniture. Peoria is famous for tractors and liquor. Moline makes farm implements. Elgin makes watches. The biggest government arsenal in the world stands on a Mississippi island off Rock Island. East St. Louis, a major U. S. rail and stockyard center, makes chemicals, bottles, railroad equipment, and products of brick, tile, oil and aluminum. Springfield, the capital, where Abraham Lincoln lived and is buried in Oak Ridge Cemetery, makes electric meters and heavy road-building machinery.

French traders and missionaries, late in the seventeenth century, were the first white men in Illinois. Marquette and Joliet, in 1673, were the first known explorers. Politically, Illinois is divided. Chicago, where nearly half the population lives, is controlled by a Democratic machine. Downstate Illinois is generally Republican.

Indiana

Indiana's fifty-mile waterfront on Lake Michigan is one of the great industrial centers of the world, turning out iron and steel and oil products that lift this otherwise largely agricultural state to ninth place in U. S. manufacturing. The component cities—East Chicago, Gary, Hammond and Whiting—have some of the world's largest industrial plants, and their great output is further swelled by the inland factories of South Bend, Indianapolis, Fort Wayne, Evansville and Terre Haute. The list of products is endless—automobiles, farm implements, aviation and railroad equipment, sewing machines, machinery of all kinds, and tons of raw steel—all made from Great Lakes iron ore.

As a miner, Indiana ranks sixth in coal, and high in limestone which is shipped over the nation and abroad. As a farmer, Indiana stands third in soy beans, fourth in corn, thirteenth in tobacco, high in onions, also grows wheat, oats, rye and tomatoes. The canning of vegetables and juices is an important industry, and the

state produces two-thirds of all U. S. peppermint and spearmint oil.

Level in the north, Indiana climbs to a hilly south, into the limestone area where Wyandotte Cave is the second largest U. S. cavern. Indianapolis, the capital, is the largest U. S. city not on a navigable body of water. Its site, in the state's middle, was determined when Congress gave Indiana the specified area in which to build its capital in 1816. French Lick and West Baden are mineral spring and resort centers. French traders, in the early eighteenth century, explored Indiana first. Over the years, Republicans have held an 8 to 5 edge over the Democrats in Indiana.

Iowa

Iowa stands in a class by itself as a producer of corn and hogs. The state's leadership in those departments often brings it the largest agricultural income in the nation. Ninety percent of the state is under the plow and the fertility of its soil is unsurpassed anywhere. It ranks second in oats and soy beans, also grows hemp, hay, popcorn, timothy, fruit, nuts and vegetables in great quantity. Its hens lay more eggs than any other state's.

Meat packing, centered in Sioux City, is the top manufacturing industry. Des Moines, the capital, leads the world in publication of farm journals, is one of the chief U. S. insurance centers, Cedar Rapids and Waterloo are busy food processors. Muscatine is the largest U. S. maker of pearl buttons. Council Bluffs, with only about 40,000 population, is the fifth U. S. mail center. Other Iowa factory products are farm implements, washing machines, mountain pens, and railroad and auto equipment. Coal mining runs to 4,000,000 tons a year.

Marquette and Joliet, Frenchmen, first explored Iowa in 1673. One hundred and fifteen years later Julien Dubuque named the first settlement after himself. German and Scandinavian stock dominates in Iowa and the state is usually Republican in politics. Iowa has the lowest U. S. illiteracy rate. With more than 9,000 track miles, it is fourth as a railroad state. The first Mississippi River railroad bridge went up at Davenport in 1853, and the Palmer School of Chiropractic, first in the country, was founded there in 1903. Herbert Hoover, the first President from west of the Mississippi, was born in the Iowa hamlet of West Branch.

Kansas

First in wheat, first in flour milling, fifth in oil, close to the top in cattle, flat fertile Kansas lies in the U. S. geographical center. In the east, where Kansas City stands second only to Chicago in slaughtering

and meat packing, is midwest corn country with small farms. In the west, where Dodge City once was a roaring, lawless cattle town, is the short-grass prairie land, rich for grazing, richer still for winter wheat. Corn, sorghums, oats, barley, soy beans and potatoes are other crops. Besides oil, Kansas gets zinc, coal, salt and lead from its earth.

In some years a tenth of the nation's meat packing is done in Kansas City, which adjoins Kansas City, Mo. The city handles ten million head of livestock a year, has the world's largest grain elevator, and is the U. S. leader in producing hog serum and black walnut lumber. Topeka, the capital, and Wichita also are busy meat packers and flour millers.

Fossil beds show that giant reptiles once roamed over Kansas. Spanish Coronado saw the area first in 1541 in his vain search for the mythical city of Quivira. Three hundred years later Kansas was a bloody battleground over slavery. John Brown killed slavers there before he went east to more ambitious projects. Kansas is one of the three states which prohibit the legal sale of hard liquor. Its vote is normally Republican.

Kentucky

Some of the nation's best tobacco, horses and whisky come from the gentle slope of Kentucky, running down to the Mississippi and Ohio Rivers from its mountains in the east. The state stands first in the production of native asphalt and hemp, second in growing tobacco, fourth in mining coal and making tobacco products, tenth in corn and oil, high in hemp. Wheat, oats and cotton also are grown.

Louisville, the largest city, famed for the Kentucky Derby at Churchill Downs, makes whisky, furniture, cigarettes and aluminum ware. Lexington is a big tobacco market and stands in the Blue Grass country, a principal U. S. center for breeding fine race and saddle horses. Frankfort, the capital, makes brooms, shoes and lumber products. Covington makes X-ray machinery, textiles, iron and steel products. Owensboro is a large tobacco market with diversified manufacturing. Besides coal and oil, Kentucky's important minerals are natural gas and quarry products.

Marquette and Joliet, French explorers, in 1673 first saw Kentucky when it was "The Dark and Bloody Ground," fiercely contested by Indian tribes. Daniel Boone explored the country in 1760. Mammoth Cave, in the central portion, is one of the nation's natural wonders, with passages twisting for miles under the earth. The house in which Stephen C. Foster wrote "My Old Kentucky Home" is still standing near Bardstown in a state park. The

cabin in which Abraham Lincoln is believed to have been born is preserved in a national park near Hodgenville. Kentucky is usually Democratic, though Republicans win at times.

Louisiana

Semi-tropical Louisiana, astride the mouth of the Mississippi, leads the nation in fur trapping. In some years its rich bag of mink, muskrat, opossum and raccoon is a greater pelt total than that of Canada and Alaska combined. The state, which calls its counties parishes after the old Spanish religious divisions, is high in other production—first in growing rice, sugar cane and sweet potatoes, and in shrimp fishing; second in sulfur, third in oil, fourth in salt, ninth in cotton, eleventh in lumber. In all commercial fishing, it is seventh.

Louisiana's lowest land is below sea level, and lower than any U. S. spot except Death Valley. New Orleans, the sixth busiest U. S. seaport and home of the Mardi Gras, avoids flooding only by an expensive levee and spillway system, and the world's largest concentration of drainage pumps. New Orleans' industry is steadily tending to make increased use of raw materials from South and Central America. Baton Rouge, the capital, produces chemicals and synthetic rubber, and has one of the world's largest oil refineries. Shreveport refines oil and makes fertilizer. Monroe makes paper, ink and lumber and brick products.

Some of the state's cotton, rice and sugar cane grows on the "trembling prairies," springy coastal marshlands protected by dikes. Corn, truck vegetables, citrus fruit and pecans are other products. Hernando De Soto, in 1540, was probably the first white man to see Louisiana. In politics, the state is steadily Democratic.

Maine

When the sun rises in the morning, the first spot in the nation to feel it is the peak of Mount Katahdin, rising 5,273 feet in central Maine. This state at the northeastern tip of the country is the U. S. leader in growing potatoes, in producing pulp and paper. It also is supposed to be a political barometer. While all other states hold general elections in November, Maine votes in September, giving rise to the adage, "As Maine goes, so goes the nation." It is not always true. Maine is almost invariably Republican.

Virtually all of Maine's manufacturing cities make paper or pulp products. In addition, Augusta, the capital, makes cotton goods and shoes. Portland, the largest city, makes textiles, cans sardines and blueberries. Canning and the making of

cheese and canoes are important in the Bangor area. Textiles, sheeting and ging-ham come out of Lewiston's mills. Tanneries, machinery works and boot and shoe plants are scattered along the state's rivers.

Samuel Champlain, the French explorer, looked over Maine's rugged, forested area in 1604, but the Cabots had visited the region a century before. Settlement began three years later and Maine was first in the English colonies here to build a church, a ship and a blockhouse. After the potato, crops are hay, oats, buckwheat and apples. With 2,465 lakes, hundreds of streams and a bracing summer climate, Maine is famous as a resort state. Fishing is excellent and deer, bear and other game are plentiful.

Maryland

In some years, one out of every three cans of tomatoes opened in the United States comes from small, odd-shaped Maryland which is almost cut in two by the upthrust of Chesapeake Bay. The state is a leader in all vegetable canning, and is one of the largest chicken raisers in the East. With nineteen streams in its small area, Maryland has more river frontage than any other state. Baltimore, well up Chesapeake Bay, is the nation's third busiest seaport, and a national leader in the surety or bonding business. Maryland holds fifteenth place in U. S. manufacturing. Baltimore makes planes, steel, clothing, fertilizer, chemicals and is a big meat packer. Frederick is a center of flour milling, vegetable canning and butter making, and also turns out electrical machinery. Cumberland and Hagerstown have diversified manufacturing. Annapolis, the capital, is the site of the United States Naval Academy.

Low and flat on the Atlantic Ocean and Chesapeake Bay, Maryland rises to a mountainous west. In tobacco growing, the state ranks tenth and, in addition to all kinds of vegetables, it grows wheat, hay, corn, potatoes and barley. Coal, sand and gravel, cement and stone are the leading mineral products.

Maryland's settlement began in 1634 at St. Mary's under an English charter to Lord Baltimore. The state capitol, built in 1772, is the only one besides that of Massachusetts to antedate the Revolution. Maryland still retains the whipping post for punishment of some crimes. Democrats hold the edge in Maryland politics.

Massachusetts

From the beginning of American history, Massachusetts has led the nation in the making of textiles, and Boston, the capital, has been the biggest U. S. wool market. Until recently, when California moved in

t the top, Massachusetts held an unbroken lead in commercial fishing. In all manufacturing, the state stands in eighth place and despite the great dominance of textiles, its factories are famous for a great variety of products. Within its borders are four of the twenty-seven busiest U. S. industrial areas.

Lynn has been making boots and shoes since 1636. Waltham, the site of the first U. S. power loom, became notable for watch making. Cambridge turns out soap, candy and machinery. Worcester makes machine tools and wire products. Springfield is a big small arms producer for the Army, and also makes motor vehicles and electrical machinery. Lawrence is the nation's biggest worsted cloth center. Fall River makes clothing and Lowell has 400 plants of diversified output.

Massachusetts, fairly level and rising to the Berkshires in the west, was possibly looked over by Eric the Red and his Norsemen as early as 1000. The crossing of the Mayflower and the landing of the Pilgrims in 1620 began its long and significant role in U. S. history.

Boston, the ninth U. S. city in size, and the ninth busiest U. S. seaport, is especially rich in historical lore. It was a prime mover in the Revolution during which Faneuil Hall became known as "The Cradle of Liberty." From the tower of Christ Church, on Copp's Hill, were flashed the lanterns that began Paul Revere's celebrated ride. And the Battle of Bunker Hill was fought at Boston.

In the glory of the old whaling days, New Bedford and Nantucket were famous ports. Both still are big fishing ports, although first place in the state's commercial fishing shifts between Boston and Gloucester. In some years Massachusetts leads the nation in growing cranberries. Other crops are tobacco, potatoes, wheat, corn, oats, buckwheat and apples. Maple syrup and sugar are made in good quantity. Massachusetts granite and marble are used all over the nation. Employment in Massachusetts factories was long a strong magnet for European immigration, and Boston, in particular, has a large Irish population. Over the years, Republicans held the edge in the state's politics.

Michigan

On the map of Michigan, draw an eighty-five-mile circle around Detroit and it will contain the home plants of the companies that make nine out of ten American automobiles. The vast auto industry which began fifty years ago out of Michigan's carriage-building business puts the state first in manufacturing, makes Detroit the third U. S. industrial center. Flint and Pontiac share the auto honors with De-

troit. Dozens of other communities make parts or bodies.

Michigan's diversified industry also is great, ranging in output from airplanes to flypaper. Grand Rapids is the U. S. furniture center. Lansing, the capital, makes Diesel engines, hoists and pumps. Bay City makes cigars and heavy machinery. Saginaw makes sugar and boilers. The state leads in making refrigerators, stands third in drugs and medicines.

First explored by French Jean Nicolet in 1634, Michigan is the only state split completely in two large parts. The north peninsula, between Lakes Superior and Michigan, is mining and timber country. The southern one, between Lakes Michigan and Huron, is agricultural and manufacturing country.

Connecting Superior and Huron is the busiest canal in the world—the Sault Ste. Marie. During eight months of the year it handles more than a hundred ore and grain ships each day. Two of its five locks are the world's longest.

Michigan is great for more than factories. It is the U. S. leader in salt-making. It is second in mining iron ore. It once led in copper, is now sixth, but its copper ore is still richest per pound.

Rugged and forested in the north, the state slopes down to fertile farm areas. It ranks second in growing dry beans, fourth in grapes and peaches, seventh in potatoes, high in sugar beets. Its 6,000 inland lakes and 2,300 miles of Great Lakes shoreline make it a good vacationland. Over the years, Republicans have held a strong edge in Michigan politics.

Minnesota

A few square miles in northern Minnesota contain perhaps the most precious of U. S. natural resources. The Mesabi, Cuyuna and Vermilion Ranges pour out from 60 to 70 percent of all the nation's iron ore. The shipping of the rich material makes the Lake Superior port of Duluth (with Superior, Wis.) the second busiest U. S. port, its tonnage exceeded only by New York.

Farm and factory are equally important in Minnesota. It is first in growing oats and making butter, second in eggs and milk, near the top in farm cash income, high in corn, wheat, potatoes, rye and barley. Minnesota was once important in lumbering but greedy exploitation ruined its forests for commercial production. It is a great summer resort state with more than 11,000 lakes, one of them being Lake Itasca, the source of the Mississippi.

Minneapolis, the chief business center of the northwest, is one of the nation's largest flour millers, and also makes electric machinery, furniture and foundry

products. St. Paul, the capital, is the world's largest publisher of law books, and is a leader in advertising specialties. South St. Paul is a U. S. leader in stockyards capacity. Meat packing and food processing are important in many communities. Minnesota, with its southern half a rolling plain, was first seen in about 1655 by Radisson and Groselliers, French traders from Canada. Scandinavian elements predominated in its settlement. The state is famous for its lake fishing, and deer, bear and fur animals are still plentiful in the forested north. In politics, Minnesota is usually Republican.

Mississippi

Mississippi, one of the least industrial of states, is a stronghold of the Old South. Many of the old plantations remain intact and the world's largest cotton plantation, of 35,000 acres is at Scott. The state is one of the two in the nation in which more than half of the population makes a living directly from the soil. It ranks second in cotton, also grows corn, peanuts, oats, pecans, sugar cane. It stands sixth in lumber production. Oil is a recent but increasingly important product.

Despite its agricultural character, Mississippi reflects the southern trend toward industrialization. Since 1933 the value of its factory products has increased about 450 percent; the number of factories, 100 percent; factory wages paid, 575 percent. Jackson, the capital and largest city, makes cotton, iron and lumber products. Vicksburg refines oil. Laurel is the home of the Masonite Corporation, has the world's only sweet potato starch plant. Meridian and Greenville make cotton goods.

Hilly in the east, the state slopes toward the Mississippi River. Spanish Hernando De Soto first saw it in 1540. It supplied a turning point in the Civil War when Grant took Vicksburg on July 4, 1863, at terrific cost. Of 16,653 Union graves in Vicksburg National Military Park, 12,912 are marked "unknown." Mississippi was first to ratify the 18th amendment, is one of the three states which ban the sale of hard liquor. It has the second largest U. S. Negro population. In politics it is overwhelmingly Democratic.

Missouri

Missouri touches both South and North, ranks high in both farm and factory, and leads the nation in mining lead, making corn cob pipes and breeding mules. Corn, wheat, oats, barley, sorghums, potatoes, tobacco and cotton grow on its fertile table land which climbs to the Ozark Mountains in the southwest. The state is fourth in production of eggs, fourth in mining zinc and fifth in growing soy beans.

The industrial might of Kansas City and St. Louis lifts Missouri into thirteenth place as a manufacturing state. The ninth U. S. industrial city, St. Louis, assembles and makes automobiles, shoes, drugs, chemicals, beer, street cars, and is one of the largest U. S. fur markets. Kansas City, which adjoins Kansas City, Kan., makes steel and flour, packs meat, refines oil, and is the second largest U. S. horse and mule market. St. Joseph and Jefferson City, the capital, are busy at diversified manufacturing. Cement is an important Missouri product.

St. Louis and Kansas City both are among the great U. S. rail centers. The Eads Bridge, over the Mississippi at St. Louis, is said to handle more freight cars than any other bridge in the world.

The French explorer, La Salle, first saw Missouri in 1682. Mississippi River traffic, still in big volume to St. Louis today, was a big factor in settlement, in which German stock predominated. The homes of two of Missouri's most publicized sons—Mark Twain and Jesse James—are well-visited tourist attractions. In politics, Missouri runs to the Democratic side, with occasional Republican inroads.

Montana

Montana's history is the old Western story—there were few settlers until a gold strike in 1858, after which they came in rapidly. Today the state takes lead, zinc, silver, coal and oil from the earth, but copper is the big cash mineral product. Butte, the largest city, sits on "the richest hill in the world," made of mines which once supplied half of U. S. copper. Anaconda has the world's largest non-ferrous reduction plant, and Great Falls, too, is a copper refiner. Billings has large beet sugar factories, and is a big shipper of cattle and flour. The main street of Helena, the capital, used to be Last Chance Gulch, of gold dust fame.

Agriculture, greatly dependent on irrigation, has become the state's leading industry. Curiously, it spread from west to east, after the first crops and cattle were raised in Montana's Rocky Mountain western part to sell to the miners. The state is seventh in wheat growing, also raises barley, oats, corn, potatoes and fruit. Livestock, wool and lumber are major products.

French explorers from Canada, in 1742, were the first white men to see Montana which has some of the most rugged of U. S. scenery, particularly in the Glacier National Park area. The state is popular for hunting, fishing and dude ranching. On Yogo Creek, in the Judith Basin, is a sapphire mine which produces half of the nation's output of precious stones. An increased industrial future is possible for

Montana because of the fine water power potential. In state politics, Montana is usually Democratic, but it has fluctuated over the years in national politics.

Nebraska

Centuries ago Nebraska was the floor of an inland sea and today it is a great sea of grain. The state ranks second in rye, third in corn and wheat, fifth in barley and seventh in oats. In its fertile soil grow 400 varieties of native grass—a number not exceeded by any state. Nebraska is one of the largest producers of dry beans. Its sizable cattle and hog industry help to make Omaha the country's fourth rail center, one of the greatest stockyard and meat-packing centers. One of the world's largest creameries is at Lincoln, the capital. Flour, freight cars, brick and tile are other Nebraska factory products. Oil was discovered in 1939 and built to a 5,000,000-barrel production.

Coronado, the Spaniard, saw Nebraska first in 1541 while searching for Quivira, mythical city of wealth. Three hundred years later the state was a crossing ground for the California, Denver and Oregon trails and the Pony Express.

Nebraska has large German and Scandinavian elements. In twenty national elections since 1868 it has gone Republican thirteen times. In 1937 Nebraska opened the first one-house Legislature in the country, a body to which members are elected without party designation.

Nevada

Famous in U. S. history for the fabulous Comstock Lode, famous in headlines for easy divorce, Nevada is the sixth state in size but smallest in population. Against a national average of 46.3 persons per square mile, Nevada counts little more than one per square mile. Its history is almost a story of its mines which have given up hundreds of millions in gold, silver, copper, lead, zinc, quicksilver and tungsten.

Nevada created new industries in 1931 by requiring only a six weeks' residence for divorce and by legalizing gambling. The gaming tables now pay a 1 percent business tax. Tourists also are drawn by the grand spectacle of Boulder Dam, the world's highest, on the Colorado River, near Las Vegas. Nevada's crops, mainly wheat, barley and potatoes, virtually depend on irrigation. Its manufacturing, in creameries, planing mills, food and meat plants, is of only local importance.

Francisco Carces, a Franciscan friar, enroute to California in 1775, first saw Nevada's rugged scenery. Fifty years later Hudson's Bay trappers entered the area from the north. Until the discovery of the Comstock Lode, the population was about

a thousand, but the rush for gold and silver brought in more than 50,000. Today, the largest city, Reno, is little more than 20,000. Carson City, the capital, is only 2,500. Nevada was first in the world to use gas for capital punishment. Politically, it fluctuates between Democrats and Republicans.

New Hampshire

New Hampshire is the only state that ever played host to the formal conclusion of a major foreign war. The scene was Portsmouth, the state's principal Atlantic port, where the treaty settling the Russo-Japanese War was signed in 1905. Fairly level and flat in the Portsmouth area, New Hampshire rises in the north to the White Mountains, the highest in New England. The strongest U. S. wind velocity—188 miles per hour—has been recorded atop Mt. Washington.

The sandy and stony loam of New Hampshire needs liberal fertilization for the growing of its principal crops—fruit, truck vegetables, corn, oats, hay and potatoes. The state's farming runs strongly to dairying. Mica, feldspar, clay and granite are the principal mineral products of New Hampshire's rugged earth. With 1,300 lakes and good climate for both winter sports and summer vacations, the state is highly popular as a resort area.

U. S. commercial grape-growing began in 1853 at Concord, the capital. Sixty percent of New Hampshire manufacturing is in textiles, leather goods, and pulp and paper products in the factories of Manchester, Berlin, Dover and Nashua. Shoes are another important product. Martin Pring, an English sailor, first looked over New Hampshire in 1603 and its settlement began twenty years later at Portsmouth and Dover. Two houses, built in 1664 and 1668, still stand in Portsmouth. Over the years, Republicans hold the edge in New Hampshire politics.

New Jersey

New Jersey is the fourth smallest of states but it pulls a mighty oar in the U. S. economy as one of the most intensely industrial areas in the nation. The state's thousands of plants make virtually everything from pins to battleships to give it sixth place in U. S. manufacturing.

Hilly in the north, New Jersey slopes to a low, flat, southern end crammed with truck gardens growing a great variety of fruit and vegetables for the state's own big cities, for New York and Philadelphia. In commercial fishing off an Atlantic coast line that is studded with summer resorts, New Jersey ranks ninth.

Giovanni da Verrazano, a Florentine sailor carrying French papers, first saw

New Jersey in 1524. In subsequent settlement the state became rich in U. S. lore and Colonial history. The oldest U. S. highway, built in 1650, can still be seen in Warren County. The first U. S. lighthouse was erected at Sandy Hook in 1764. The first U. S. iron works were set up in 1740 at Ringwood. Good transportation and proximity to raw materials and big markets marked the state for industrial development.

New Jersey leads the nation in dyed and finished textiles; chemicals, paints and varnish; elevators and elevator equipment; and tanning materials and dyestuffs. Newark, the largest city, has more than 1,300 factories, is a big insurance center. Trenton, the capital, is famous for pottery and clay products. Paterson is the U. S. silk center. Camden makes everything from pen points to talking machines to warships. Other humming industrial cities are Jersey City, Passaic, Kearney, Elizabeth, Bayonne and Hoboken.

New Jersey's seaports are among the busiest, but they are counted as part of the Port of New York. Atlantic City, Ocean City, Cape May, Asbury Park, Ocean Grove and Wildwood are the principal coast resorts. New Jersey mines zinc and clay, is second in U. S. peat production. In politics, the state fluctuates between Democrats and Republicans.

New Mexico

Mountainous New Mexico, fourth in size and fourth in high elevation, is devoted to mining, cattle raising and agriculture that is virtually dependent upon irrigation. Santa Fe, the capital, is the oldest seat of government in the nation. It was founded in 1605 by the Spaniards and on its central plaza there still stands an ancient adobe building known as The Palace, built in 1610 and used until 1909 as the official home of the Spanish, Indian, Mexican and American governors. Rich in aboriginal history, New Mexico has been a treasure chest for students of such early Americans as the Pueblo Indians and their communal civilization. In the north the Navajos live on a 16 million acre reservation, the nation's largest.

On once arid but now irrigated land, New Mexico grows corn, wheat, potatoes, sorghums, cotton, vegetables, sugar beets and fruit. As a miner, the state ranks second in tin, and fourth in copper, zinc and vanadium. It has a substantial lumber industry in pine and Douglas fir. Some oil is produced and the state has vast undeveloped coal resources.

Albuquerque, the largest city, turns out a variety of small manufacturing products. The state's dry and healthful climate makes Santa Fe and other communities well patronized health resorts, especially

for persons suffering from lung ailments. Cabeza de Vaca, the Spanish explorer, traversed New Mexico first in 1528-36. In politics the state tends to be Democratic.

New York

New York, with the great metropolis of New York City, is the spectacular nerve center of the nation. It leads in population, manufacturing, foreign trade, commercial and financial transactions, book and magazine publishing, theatrical production and in a host of other fields. It is the principal key state in any national election, and so significant in the life of the country that any New York Governor is almost automatically a Presidential possibility.

New York City, where more than half the state's population lives, is not only a national but an international leader. It is the busiest seaport in the world, loading and unloading scores of ships each day. LaGuardia Field is the world's largest commercial airport and an even greater one, Idlewild Airport, is on the way to completion. New York City's annual bank clearings are nearly 50 percent greater than the combined total of the next fifteen U. S. cities, and a stormy day in the great financial community of Wall Street causes repercussions around the globe. First in manufacturing since 1824, the city today has a gigantic clothing and fur industry, and also makes chemicals, paints, drugs, machinery, paper, wood and textile products. Manhattan, the principal of the city's five boroughs, has the tallest buildings in the world.

New York City's factories and workshops account for 60 percent of the state's 7 billion dollars of annual manufacturing value. Nearly all the rest of the state's manufacturing is done along the Hudson River north to Albany, and the New York State Barge (Erie) Canal west to Buffalo. The third busiest Great Lakes port, Buffalo makes planes and flour, and products of rubber, iron, steel, meat, grain and chemicals. Rochester leads the world in making photographic and optical equipment. Troy is the largest U. S. shirt and collar center. Utica is a big textile city and makes a third of all U. S. knitted underwear. Syracuse makes typewriters, washing machines, auto bodies and parts, and heavy implements. Albany, the capital, has important diversified manufacturing.

Except for the busy belt from New York to Albany to Buffalo, New York's economic life is distinguished by nothing but an intense devotion to dairying and fruit and vegetable growing to supply the daily food needs of the great urban centers. It is one of the U. S. leaders in milk and cheese production, and in growing such table staples as potatoes, onions and cabbages. The state

ranks second to California in growing grapes and has a big wine industry.

New York is level or hilly in the west and central parts and broken by the Adirondack and Catskill Mountains in the east. It ranks second in production of salt, and eleventh in oil, the wells being in the southwest adjacent to Pennsylvania fields. Iron ore and zinc are found in small quantities.

The state leads the nation as a tourist attraction. The convention and tourist business is New York City's fifth greatest source of income, and there are famous resort areas upstate in the mountains, and around Lakes George and Champlain. Lake Placid is notable around the world as a winter sports center. Long Island is another of the state's playgrounds. Trudeau sanitarium, at Saranac Lake, was first in the world to treat tuberculosis on a large scale.

Henry Hudson, an Englishman working for the Dutch, first saw New York in 1609 when he sailed up the Hudson to Albany. In the same year Samuel de Champlain, a Frenchman, came down from Canada and named a big lake after himself. On the basis of Hudson's work, the Dutch bought Manhattan Island from the Indians for \$24 worth of trinkets and set up the colony of New Amsterdam. In 1664 the English seized the colony and re-named it New York. One of the decisive battles in world history was fought at Saratoga in the Revolution in 1777 when the Americans defeated Britain's big campaign to cut the colonies in half. For a short time New York City was the United States capital, and George Washington was inaugurated there as first President on April 30, 1789. New York is Republican upstate and Democratic in New York City. In both national and state elections, control has divided over the years between the two parties.

North Carolina

North Carolina is the nation's busiest tobaccoist. It grows 40 percent of all U. S. tobacco, about 70 percent of all U. S. of cigarette tobacco. Its factories—the biggest are at Durham and Winston-Salem—make more than half of the more than 100 billion cigarettes that the country smokes in a year. Adding to this the output from the cotton mills and clothing factories

Charlotte, Durham, Greensboro, Winston-Salem, and Raleigh, the capital, North Carolina stands twelfth in the nation in manufacturing. And with corn, cotton, soy, peanuts and fruit added to the huge tobacco crop, it ranks among the top leaders in agriculture.

North Carolina's mountains are believed to be the oldest in the country. Mt. Mitchell, at 6,684 feet, is the highest east of

the Mississippi. The state's many streams and falls give it the fourth best U. S. potential in hydro-electric power. It leads in the mining of mica, feldspar and bromine, is second in asbestos. It ranks seventh in lumber production and, in Great Smoky National Park, has the largest U. S. stand of red spruce. Furniture manufacture is growing in importance. The resort business, both at the shore and in the mountains, is extensive.

The English made their first, but unsuccessful, attempt to settle North America at Roanoke Island in 1584. Virginia Dare, the first white child of English parentage in North America, was born there in 1587. In the Civil War, North Carolina lost more men than any other state. In politics, North Carolina is regularly Democratic though it broke the Solid South tradition in 1928 by voting Republican in the national election.

North Dakota

"Number One Northern Hard"—a famous grain grading—defines a wheat first grown in North Dakota, one so good it gets a 10 to 16 percent price premium. The Red River Valley, immortal in U. S. folk song, is important to North Dakotans as a remarkably fertile bread basket. The state ranks first in spring wheat, first in barley, second in all wheat, third in rye, sixth in oats. A total of 87 percent of its acreage is farm land. Most of its manufacturing—the making of butter, cheese, flour and milk products—is tied directly to the land.

Bismarck, the capital, has recorded the greatest U. S. temperature extreme—from 114 above to 45 below zero. Fargo is the largest city. Geologists believe that North Dakota holds two-thirds of American deposits of lignite. Mining and processing of lignite is a growing industry.

A French fur trader known as Verendrye first entered North Dakota from Canada in 1738. Sacajawea, a Shoshone Indian woman, is probably North Dakota's most notable person. In 1805 she joined Lewis and Clark and made herself so useful as guide and diplomat that the expedition might have been lost without her. Dakota Territory was separated into North and South Dakota in 1889. Politically, North Dakota usually is Republican, but in times of agricultural depression has shown strong liking for third parties promising quick relief.

Ohio

With vast coal and oil fields at one hand, with Great Lakes iron ore close by at the other, Ohio automatically developed into one of the nation's greatest industrial states. It ranks fourth in all manufacturing and contains three of the first seven-

teen U. S. industrial areas. Cleveland, the largest city, is the world's biggest handler of iron ore. In all, six Ohio cities place among the fifteen busiest Great Lakes ports.

Cleveland's vast and varied factory output includes the U. S. leadership in wire, nails, nuts and bolts. Akron's many rubber plants can make more than 125,000 tires a day and, before synthetic rubber, used half of all U. S. crude rubber imports. Cincinnati makes tools and paper and is a national radio center. Canton and Youngstown make dozens of heavy steel products. Dayton is famous for cash registers, also makes golf clubs, refrigerators and motors. Toledo, with a big factory production, is also the largest coal shipping point in the world. Springfield makes trucks and steel caskets. Columbus, the capital, turns out mining machinery, railroad cars, shoes and glass.

Ohio's thousands of factories almost overshadow its importance in two other basic industries—mining and agriculture.

The state ranks fifth in coal, thirteenth in oil, fourth in sand and gravel, high in clay products, and leads all the states in production of lime and limestone.

Its fertile soil, high in the middle and sloping off toward Lake Erie on the north, the Ohio River on the south, stands fourth in soy beans, sixth in corn, sixth in wheat, high in grapes, eleventh in tobacco. Ohio is fifth in egg production and its dairying and livestock feeding are extensive enough to place the state about seventh in all farm cash income.

The first Europeans explored Ohio in about 1650. Five Presidents have been elected from Ohio, and two others elected from other states were born in Ohio. In recent years Ohio has fluctuated between Democrats and Republicans.

Oklahoma

Oklahoma, with rolling plains spread westward from the wooded Ozark Mountains, stands fourth in U. S. production of oil, fourth in growing of wheat, first in mining of zinc. Tulsa, one of the world's wealthiest per capita cities, is a great oil center where most of the major firms maintain offices. Oklahoma City, the capital, pumps oil wells just a few steps outside its business district. Oil refining, zinc smelting, meat packing and flour milling are chief factory industries. The development of glass products is ever increasing. The state leads in growing broom corn, also grows oats, corn, cotton, sorghums and potatoes.

Hernando Coronado, Spanish explorer, first saw Oklahoma in 1541 while searching for the mythical city of Quivira. In 1834 white settlers were barred when most of Oklahoma was set aside as Indian ter-

ritory. At noon on April 22, 1889, the major part was opened to homesteaders and in one day 50,000 persons swarmed in. The term "Sooners" was born. It applied to the greedy who had sneaked in sooner than the law allowed. Today Oklahoma has the biggest U. S. Indian population, more than 60,000, and some of them are wealthy from oil discoveries on their land. One payment to the Osage Indians totaled \$22,000,000 in 1926. One of the state's natural wonders is the Great Salt Plain in the northwest, level as a table top, the residue from an ancient inland sea. Oklahoma is one of the three states which forbid the sale of hard liquor. In politics it is usually Democratic.

Oregon

While it ranks second to Washington in the cutting of lumber, Oregon could easily be first. The state has the greatest U. S. reserve of standing timber—about 438 billion board feet which is 20 percent of the nation's total. Oregon stands near the top in the raising of a great variety of fruit, and its salmon fishing industry, centered at Astoria at the mouth of the Columbia River, is one of the world's largest. The state leads in growing hops, also raises nuts, wheat, hay, oats and potatoes. Oregon has much undeveloped mineral wealth, including gold, silver, copper, lead, iron and platinum. Mercury, chromite and antimony are mined in quantity.

Oregon's coast is lush and green with very heavy rainfall. In the southeast, far back of the Coast and Cascade Mountain Ranges, it runs to near-desert land. Portland, a hundred miles up the Columbia River, is the fourteenth busiest U. S. seaport, the third most active Pacific port. Besides being a big shipper of wheat and lumber, Portland has factories which account for a third of the state's manufacturing, including lumber and food products, flour and machinery. Salem, the capital, is an important canner and maker of wood products.

Francis Drake, the Englishman, or the early Spanish sea captains, may have looked on Oregon in the early sixteenth century. Bruno Hecata, a Spaniard, in 1775, was the first known to have landed there. Oregon early attracted substantial settlers and was the first of the far-Western states to be settled without the help of a major gold rush. Republicans have usually predominated in Oregon politics.

Pennsylvania

From the steel mills of Pittsburgh through the mid-state coal mines and oil wells to the shipyards and factories of Philadelphia, Pennsylvania bristles with

heavy industry that has made it an American bulwark since early Colonial days. The state is second in manufacturing, second in all coal mining, first in anthracite coal mining, ninth in oil production and ships, and vast export volume out of Philadelphia, the second busiest U. S. seaport.

Iron and steel are the state's trademarks. Before 1892 Pennsylvania was making iron and by 1727 it was exporting iron to England. Today about half of U. S. iron and steel is made in the Pittsburgh area where they are saying runs, "Times is tough when the sky ain't smoky." Pittsburgh also is a big maker of electrical machinery. Philadelphia plants turn out machinery and textiles, and products of oil, coal, food and chemicals. Harrisburg, the capital, makes boilers, engines, knit goods and iron, steel and tobacco products. Scranton is the second largest U. S. silk manufacturing center. Wilkes-Barre makes locomotives, wire, machinery, and iron and steel and textile products. Allentown turns out trucks, busses, machinery, cigars, textiles and is a big cement producer. Erie, the fourteenth Great Lakes port, makes locomotives, blast furnaces and other heavy products, and Reading is one of the nation's biggest silk hosiery and underwear makers.

Traversed by the Appalachians through its central part from northeast to southwest, Pennsylvania contains virtually all the U. S. anthracite (hard coal) deposits. These lie in the northeast, around Scranton and Wilkes-Barre. Aside from coal and oil, Pennsylvania is the U. S. leader in producing cement, coke, cobalt and lead and zinc pigments. It ranks high in stone, clay, peat and natural gas.

As a farmer, the state stands first in growing buckwheat and seventh in tobacco. It is high in apples and potatoes, and also raises corn, wheat, oats, barley, hay and peaches.

Rich in historical lore, Pennsylvania was founded as a colony in 1681 by William Penn, the Quaker. Benjamin Franklin became its most famous citizen. Philadelphia was the seat of the Federal government most continuously from 1776 until 1800 and there the Declaration of Independence was signed, and the Constitution formulated. Valley Forge, of the Revolution, and Gettysburg, the turning-point battle of the Civil War, both are in Pennsylvania. In politics, the state usually is Republican.

Rhode Island

Little Rhode Island—it would fit into Texas 220 times—set the theme for its future in 1790 when Samuel Slater established the first cotton thread spinning mill in the nation at Pawtucket. Today Rhode Island has the greatest per capita

industrial output in the country, and the bulk of the products comes from the great textile mills of Pawtucket, Providence and Woonsocket. Tools and machine tools are other leading products and Providence, the capital, is one of the largest U. S. jewelry centers.

Rhode Island has by far the greatest density—nearly 700 persons per square mile as against the national average of 46.3. More than nine tenths of the people live in the cities. To the south, in the low, rounded hills of Rhode Island, dairying and truck farming are carried on despite the sterility of the boulder clay soil. Potatoes, corn, apples, oats and hay lead the crop list.

Roger Williams founded Providence, and subsequently Rhode Island, in 1636 after he had been banished from Massachusetts for non-conformance in religious doctrine. Newport is the site of the Naval War College and was long a showplace for the magnificent summer homes maintained by wealthy persons from New York. Republicans have held an edge in Rhode Island politics.

South Carolina

Once primarily agricultural, South Carolina has built so many big cotton textile mills that today the state's factories double the output of its farms in cash value. Greenville, the principal textile center, turns out 4,500 different cloth patterns. Columbia, the capital, and Spartanburg are humming cotton mill cities. Charleston, the largest city and busiest seaport, makes asbestos, wood, pulp and steel products. Many South Carolina communities make commercial fertilizer in volume.

Running from a sandy coastal belt to the Blue Ridge Mountains in the west, the state ranks fifth in growing cotton, fifth in tobacco, and twelfth in lumbering. Turpentine and resin are major products from its vast yellow pine forests. Only California and Georgia grow more peaches than South Carolina, which also raises corn, hay, oats, sweet potatoes and peanuts. Stone, clay, and sand and gravel are the principal mineral products.

Spaniards in the early sixteenth century were the first white men to see South Carolina. Under the English, North and South Carolina were one large colony until they split in 1729. Civil War hostilities started at Charleston when, on April 12 and 13, 1861, South Carolina men bombarded and captured Fort Sumter. Later in the same war, the Confederates operated in Charleston harbor the first submarine ever used in warfare. South Carolina is steadily Democratic in politics.

South Dakota

South Dakota offers a varied set of extremes. The Homestake Mine, at Lead, is the richest single U. S. gold mine. At \$3,000, South Dakota's Governor is the lowest paid U. S. Governor. In the Black Hills is 7,242-foot Harney Peak, the highest spot east of the Rocky Mountains. Also in the Black Hills, at Mt. Rushmore, a gigantic national memorial is being sculptured from solid rock on a granite face 700 feet high which will feature the heads of Washington, Jefferson, Lincoln and Theodore Roosevelt. Armstrong County, an unorganized unit in South Dakota, has a population of forty-two—the smallest U. S. county population.

Seventy-five percent of the state's people are in agriculture or dependent industries. In a recent good year the crop value was \$245,000,000. In a recent bad year it was \$28,000,000. South Dakota is first in rye, third in barley, fifth in oats, seventh in corn, eighth in wheat. Cattle raising and dairying are strong industries. Pierre, the capital, and Sioux Falls, Aberdeen, Rapid City and Huron all are cattle shippers, meat packers, makers of butter, cheese and flour.

In the southwest are the desolate Bad Lands and the beautiful Black Hills. South Dakota's gold was discovered in 1874 by General Custer's men on Indian land in the Black Hills. When the gold-hungry whites swarmed in illegally, the Sioux took to the warpath and one result was the Custer massacre in 1876. Feldspar, bentonite and mica are other mining products. The French trader, Verendrye, first saw South Dakota in 1743 when he came down from Canada looking for a western ocean. In South Dakota politics, Republicans usually have their way.

Tennessee

While Tennessee is far down the list in U. S. industry, it won world prominence in 1945 for the single product of one factory—the atomic bomb that was a product of the Clinton Engineer Works at Oak Ridge in the Tennessee Valley and of plants in Washington and New Mexico.

Aside from that distinction, Tennessee is a predominantly agricultural state affected by the South's steady trend toward increased industrialization. It places fourth as a cotton grower, and thirteenth in corn. Other crops are wheat, oats, barley, hay, potatoes and peanuts. Lumbering is extensive. The state is tenth as a coal miner, also produces stone, zinc and cement.

The Tennessee Valley Authority, a system of big dams on the Tennessee River and its tributaries, has been a great benefit

to the state for flood control, cheap electric power, increased navigation and artificial lakes for recreation. Tennessee runs from the Great Smoky Mountains in the east down to tableland and then down to the Mississippi bottoms. One of its natural beauty spots is Fall Creek Falls, a 256-foot waterdrop, the highest east of the Rockies.

Memphis, the largest city, is the biggest U. S. inland cotton market, the biggest hardwood lumber market. Nashville, the capital, has diversified factories, is a leader in publication of religious periodicals and books. Knoxville has cotton mills. Chattanooga's 440 factories make 1,500 items from clothing to boilers. Hernando De Soto, Spanish explorer, first entered Tennessee in 1541. One of the highest battles of the Civil War—the Battle Above the Clouds—was fought in the state on Lookout Mountain. Tennessee is usually Democratic.

Texas

Big, sprawling Texas is the richest political subdivision in the world, with the possible exception of the Russian Ukraine and India. The state leads the nation in production of oil, natural gas, cotton, beef cattle, helium, sulfur, sheep, wool, goats, onions and turkeys. Texas cotton—a third of the U. S. total and a seventh of the world total—is the most valuable crop grown inside a component state. Texas is the only state to top a billion dollars a year in mineral production. Aside from its "firsts," Texas ranks high in other items—second in grapefruit, third in eggs and oranges, fifth in pears, sixth in peaches, second in peanuts, seventh in sweet potatoes, ninth in lumbering. More than fifty crops are grown on a commercial scale, including corn, wheat, oats, sorghums, potatoes, rice, pecans and a long list of vegetables.

Most of the state's big production records stem from its size—one-twelfth of the nation. Its largest county, Brewster, is six times the size of Rhode Island, and the whole state is 220 times the area of Rhode Island. The climate ranges from a subtropical south to a temperate north where snow averages two feet in a winter. From Texline to Brownsville, or from El Paso to Beaumont is a greater distance than from New York to Chicago.

Mountainous in the west and running eastward through broken prairie land to the lowest area along the Gulf of Mexico, Texas was explored first in 1528 by Cabeza de Vaca, a shipwrecked Spaniard. Since then, the state has flown five flags—those of France, Spain, Mexico, the Texas Republic and the United States. Texas is the only state authorized by Congress to subdivide into five states any time it wishes.

With its huge cotton and oil exports, Texas has seven of the first thirty Gulf ports—Houston, Beaumont, Port Arthur, Texas City, Corpus Christi, Port Arkansas and Galveston. Houston, the largest city, makes chemicals, fertilizer, grain products and cement. Austin, the capital, makes brick and tile, food products and furniture. Fort Worth is the largest meat packer south of Kansas City, and the biggest grain market in the South. Dallas is one of the largest U. S. inland cotton markets, an oil refiner and a big maker of cotton gins. San Antonio, the site of the historic Alamo, makes iron, steel, cotton and tobacco products. Amarillo has the only U. S. lithium plant. In all manufacturing, Texas ranks eleventh.

Texas is first in total railroad mileage, and over the Neches River at Port Arthur is the most elevated highway bridge in the world. In Pecos County is the deepest hole in the world—an oil well that goes down 15,279 feet. Texas is consistently Democratic in politics, though it broke from the Solid South to go Republican in the national election of 1928.

Utah

Utah, first in gold mining, and high in copper, silver and lead, was probably the first U. S. area to be fully explored. Not until early in this century did the world learn of the strange land in its southeast corner—a place of deep twisting canyons and weird colored rock formations. There, in an area partly inaccessible even by pack train, are the largest natural bridges in the world. Millions of years of geological history can be read in the canyon walls.

The Mormons under Brigham Young began to settle Utah in 1847. Six times in the next forty years they applied for statehood but Congress kept the door closed until 1896 when the Mormons promised to abandon polygamy. Spanish exploration in 1540 were probably the first whites to see Utah.

The state's crops require irrigation. Sugar beets rank first, then potatoes, hay, corn and wheat. There is an extensive livestock industry. Salt Lake City, the capital, the site of the Mormon Temple and a steel mill, refines ore, sugar beets and wool. Geneva and Provo are centers of steel making. Ogden and Logan process sugar beets and operate canneries.

Great Salt Lake, lying north central in mountainous Utah, has long been a world wonder. It covers 2,360 square miles, is 18 feet above sea level, has no known outlet, and a salt content of 17 to 20 percent, about three times that of the ocean. In politics, Utah switches between Democrats and Republicans.

Vermont

Vermont, the only New England state without a seacoast, is the U. S. leader in producing maple syrup and asbestos, sometimes the leader in marble and granite. In ratio to population, it keeps more dairy cows than any other state. Vermont's soil is largely devoted to truck farming and fruit growing—its rugged area dominated by the Green Mountains precludes any extensive farming. That same quality, however, along with a bracing dry climate, makes the state a great favorite both as a summer resort and as a center of winter sports.

Montpelier, the capital, and Rutland are in the granite and marble country. Some of the Rutland quarries, producing marble known all over the nation, are 300 feet below the surface. Burlington, the largest city, makes lumber products, venetian blinds, ovens and woollens. Bennington turns out knit goods, paper and furniture, and has the world's tallest battle monument, 302 feet high. The city was the base in the Revolution for Ethan Allen's Green Mountain Boys and the monument commemorates a British defeat in 1777 actually administered a few miles to the west in New York.

Samuel de Champlain, French explorer, saw Vermont first in 1609. For some years New York and Massachusetts argued over possession of the colony, and then it became an independent republic, lasting for fourteen years before joining the Union in 1791, the first after the original thirteen states. Vermont has been Republican since 1856. Only Georgia, on the Democratic side, ties that record.

Virginia

Richmond, the capital of historic Virginia, makes more cigarettes than any city in the world—about a third of the U. S. total. Both the state and its capital are richly bound up with American history. Jamestown, founded in 1607, was the first permanent English settlement in North America. Slavery was introduced to the continent in Virginia in 1619. The Revolution and the Civil War—with Richmond the Confederate capital—both ended in Virginia, and the state supplied seven of the first twelve Presidents.

Virginia steps up to the west from a low coastal belt, to the Piedmont Plateau, to the Blue Ridge Mountains, to the Appalachians. Tucked in its western mountains is the Shenandoah Valley, one of the richest U. S. farming areas. The state ranks third in tobacco and apples, also raises cotton, wheat, oats, potatoes, barley and sweet potatoes. It is fifth in growing peanuts and feeds a big part of the crop to

hogs which produce world-famous hams. In commercial fishing, Virginia stands sixth; in lumbering, tenth. There is a substantial livestock industry in southwest Virginia.

Norfolk, together with Portsmouth and Newport News, makes up the Port of Hampton Roads—the sixth busiest U. S. seaport, one that can handle a thousand ships with ease. Seventy percent of U. S. tobacco exports leave through this port. Newport News is a big shipbuilder. Iron and cotton products are important in Roanoke. Furniture, chemicals and textiles are other major products of Virginia factories. In politics, Virginia is predominantly Democratic, though it broke away to vote Republican in the national election of 1928.

Washington

Washington, in the northwest corner of the nation, has led the country in lumber production every year but one since 1905. Its rugged surface, divided north and south by the Cascade and Coast Mountain ranges, is rich in stands of Douglas fir, yellow and white pine, spruce, larch and cedar. Washington's other famous "first" is apples—it grows three to five times as many as the nearest competitor and ships them all over the nation. The state is fifth in wheat, high in all fruit, and grows barley, oats, corn, potatoes, hops and truck vegetables.

Washington ranges from a warm coast, rich in vegetation and soothed by the Japanese current, to near-desert land in the east. Grand Coulee Dam, built on the Columbia River for power and irrigation, is the world's largest concrete dam and creates a precious reservoir 151 miles long. Coal is the state's leading mineral, but the potential in gold, silver, zinc, lead and mercury is believed to be great.

The state has flourishing ports on Puget Sound—Olympia, the capital; Seattle, the largest city; and Tacoma and Everett. Spokane in the Columbia basin, the capital of "The Inland Empire," is a big power center for mining and irrigation. Food and lumber products and a wide variety of goods flow from Washington factories. The Handford Engineer Works, north of Pasco, Wash., was set up as the world's first full-scale plant for making atomic bombs. Bruno Hecata, a Spanish sea captain, in 1775, was the first white man known to have landed in Washington. In politics, the state fluctuates between Democrats and Republicans.

West Virginia

Mountainous West Virginia, the fortieth state in size, is the coal mining leader of the nation. In some years it digs 25 percent of all U. S. bituminous. Geologists

believe that if all other U. S. coal mines shut down, West Virginia alone could supply the country for 250 years. The state also ranks high in natural gas, oil, quarry products and hardwood lumber.

In 1861 Captain Thomas Batts and a party from eastern Virginia probably were the first whites to see the area. Until 1861 West Virginia was merely the north and west part of Virginia but its people created a new distinct state after refusing to secede in the Civil War. Wheat, corn, oats, hay, tobacco and fruit are leading crops. Charleston, the capital, makes glass, furniture, chemicals and steel. Huntington, the largest city, makes glass and textiles, and rolls nickel. Wheeling makes steel, tin plate, glass and medicine.

Like many mountain states, West Virginia has an equable climate, without extremes. White Sulphur Springs, in Greenbrier County, is a famous health resort. Mountain streams give West Virginia one of the highest U. S. water power potentials. In politics, Republicans have won in West Virginia a little over half the time.

Wisconsin

Wisconsin led the country in lumbering until its great pine and hemlock forests were tragically exhausted forty years ago, and then it turned to farm and factory. Today Wisconsin has more dairy cattle than any other state. In some years it makes half of the country's cheese, a third of the milk products. In total farm cash income, Wisconsin is only a few places from the top. The climate is so benign that serious crop failure is virtually unknown, and the state's many lakes make it a great summer resort favorite. Among Wisconsin's records are: first in canning peas, second in growing cranberries and hemp, fourth in oats, fifth in rye, eighth in tobacco.

Humming factories in a score of cities give Wisconsin tenth place in manufacturing. Superior, on Lake Superior, near the state's iron ore ranges, shares with Duluth, Minn., the rank of second busiest port in the nation, its tonnage exceeded only by New York. Six other Great Lakes ports—Milwaukee, Green Bay, Racine, Kenosha, Sheboygan and Ashland—are industrial centers making paper, autos, beer, machinery, furniture, clothing and scores of other products. Madison, the capital, has the only U. S. forest products laboratory.

Jean Nicolet, French explorer, seeking a northwest passage in 1634, was the first explorer to see Wisconsin. Germans and Scandinavians dominated its settlement. In 1934 it passed the first state unemployment compensation act. Republicans hold the edge in Wisconsin politics, where there long has been a strong Progressive movement.

Wyoming

Wealthy in wool, cattle, oil and coal, Wyoming was first in U. S. history to assure woman's place in politics. Its first territorial legislature in 1869 gave women the vote in all elections. And Mrs. Nellie Tayloe Ross, who held office in 1925-27, was the first U. S. woman Governor.

One of the world's largest sub-bituminous coal fields lies near Sheridan. One of the largest oil refining centers is at Casper, hard by the Teapot Dome, Salt Creek and Big Muddy oil fields. Cheyenne is famous for its annual "Frontier Days" celebration which draws patrons from Canada to Texas for the rodeo and other exhibitions of western life. Nearly every railroad town in the state is a shipper of cattle, sheep and wool.

Wyoming is second to Colorado in high, mean elevation, but irrigation in its plains areas favors the growing of corn, wheat, oats, fruits, seed potatoes. Wyoming sugar beets are the richest in the nation. Much of the state's mineral wealth is still undeveloped.

Yellowstone Park in the northwest corner is one of the greatest U. S. tourist attractions. Big game hunting is good in many parts of the state. Unless the early pioneers saw Wyoming, trappers about 1800 were probably the first white men here. The building of the Union Pacific Railroad in the 1860s gave settlement its start. Wyoming political control fluctuates between Democrats and Republicans.

District of Columbia

(Washington, D. C.)

The District of Columbia—identical with the City of Washington—is the capital of the United States and the first carefully planned capital in the world. In area it is sixty-nine and a quarter square miles carved out of Maryland on the north bank of the Potomac, a hundred miles up from Chesapeake Bay. In appearance, it is a symmetrical and generally beautiful city with more miles of tree shaded streets than any community in the world, possibly excepting Buenos Aires. It has mild winters, often oppressively hot summers, and is almost exclusively devoted to government. Washington's manufacturing, for example, is only for local consumption.

District of Columbia history began in 1790 when Congress directed selection of a capital site, 10 by 10 miles square, along the Potomac. When the site was determined, it included thirty and three-quarters square miles on the Virginia side of the river, but Congress returned that area to Virginia in 1846. Major Pierre L'Enfant, a young French engineer who had fought

in the Revolution, was commissioned by President Washington to plan the new capital, and by 1800 enough buildings were up and enough streets were laid out for the government to move in. In 1814—during the War of 1812—a British force marching overland from the Potomac's mouth burned the Capitol, fired the President's home and damaged or ruined other government buildings. It was from the white paint applied to cover fire damage that the President's home came to be called the White House.

Washington's skyline is dominated by the Capitol and the Washington Monument, a plain obelisk towering 555 feet. The Capitol, of Virginia sandstone and Massachusetts marble, overlooks the Potomac from a hill eighty-eight feet high. The top of its great dome is 288 feet above the ground. While the Capitol is not the city's center, it is the key to the street address system. Lines running through it north-south and east-west divide Washington into its four zones, northwest, southeast, etc.

During World War II Washington was one of the most crowded cities in the world. From a population of 663,000 in 1940, it shot to over a million at the peak in 1943 and its many suburbs for miles around were choked with government workers brought in for the war's office work. By the middle of 1945, the population had dropped back to 926,000.

Major L'Enfant designed a city of rectangular blocks, created by streets intersecting at right angles, and generally designated by numbers and letters. In addition, diagonal arteries fan out from various centers, making many parks and plazas suitable for statues and monuments. Pennsylvania Avenue—the radial lines are, generally, named for the states—is probably the most famous of them, with the White House at No. 1600 and the Capitol also on its route.

Washington has many world-famous buildings and monuments—the Library of Congress, Jefferson Memorial, Lincoln Memorial, Grant Memorial, Tomb of the Unknown Soldier, Treasury Building, Ford's Theater on Tenth Street in which Abraham Lincoln was shot, the Peterson House at No. 453 Tenth Street in which Lincoln died, National Gallery of Art, the new majestic government buildings on Constitution Avenue, and scores of others.

Washington is administered by three commissioners appointed by the President. Two of them must be residents of the District of Columbia, and the third must be a U. S. Army engineer.

Alaska

Alaska, the biggest, coldest and wildest of U. S. possessions, was called "Seward's

Folly" in 1867, when Secretary of State William H. Seward arranged for its purchase from Russia for \$7,200,000. Since then Alaska has paid for itself scores of times over in fish, furs, and minerals, and annual exports today run not far under \$75,000,000. Its wildlife resources alone are valued at over \$100,000,000.

Nearly a fifth of the United States in size, Alaska is a fat, blunt peninsula with two long necks. At the southwest, the Aleutian Islands run out 1,200 miles to the International Date Line. At the southeast, Alaska's panhandle runs several hundred miles down the Canadian Pacific Coast. There are east and west mountain ranges with a vast plateau in the middle, and a great plain extending to the Arctic Ocean on the north. Mt. McKinley, in the south central part, is 20,300 feet high, the tallest peak in North America.

Canned salmon—nearly 5 million cases a year—is Alaska's biggest product. Ketchikan, population about 5,000, probably cans more salmon than any place in the world. Alaska mines about \$2,000,000 a year in gold, supplies most of U. S. tin, and also turns out copper, platinum, coal, oil, gypsum, limestone, and marble. At least seventeen other minerals exist, some of them produced commercially.

The Pribilof Islands, in the Bering Sea, are world famous as the breeding ground of the Alaska fur seal. Careful government control of the annual take has increased the seal herd from 215,000 in 1912 to 2,021,000 in 1939. Beaver, muskrat, otter, mink, and other furs also are produced in the fur industry that totals several million dollars a year. Alaska, with its wild interior, still partly unexplored, is a hunter's paradise. Big game includes the grizzly, polar, and Kodiak bear, moose, mountain sheep, and caribou.

Vitus Bering, a Dane working for the Russians, discovered Alaska in 1741. Until the U. S. purchase, it was known as Russian America. Sitka was the capital until 1906. In 1912 Alaska became a territory with Juneau as capital. With only one person for every eight square miles, Alaska is by far the most thinly settled of U. S. lands. Point Barrow, the northernmost occupied spot in North America, is icebound ten months of the year. Inland winter temperatures go down to 60° below zero, but the coast bathed by the Japanese current ranges between zero and 80° F. A small amount of farming is squeezed into the short summers.

Alaska is administered by a governor appointed by the President and a locally-elected two-house legislature. Its delegate to Washington has a voice but not a vote in the House of Representatives.

During World War II the Japanese occupied the tip of the Aleutians, but U. S.

forces retook the islands in 1943. Gold mining was banned in Alaska during the war, but in 1946 the largest low-grade-ore gold mine in the world, the Alaska Juneau Mine, was preparing to open.

Alaska has magnificent glaciers and active volcanoes. In June 1912, the whole top blew off Mt. Katmai in the Aleutian range. Of Alaska's 1939 population of 72,524, about 30,000 were Aleuts, Eskimos, and Indians and most of the rest were whites.

Canal Zone

Fifty miles long and ten miles wide, with the Panama Canal crossing its middle, the Canal Zone is a protective belt of U. S. territory guarding the vital water link between the Atlantic and the Pacific Oceans. Its land area of 362 square miles is smaller than New York City. Its 1940 population was 51,287, but during World War II many thousands of Army and Navy personnel poured into the zone to man its approaches against enemy attack and to guard its three sets of locks against sabotage.

The Canal Zone, bisecting the Republic of Panama at its lowest and narrowest point, was granted to the United States by Panama on Feb. 26, 1904, for \$10,000,000 outright, an annual payment of \$250,000, later increased to \$430,000. The canal was opened ten years later. No private individuals are permitted to own land in the Canal Zone, which is administered by a governor appointed by the President. Cristobal is the port at the Caribbean end, and Balboa at the Pacific end.

The Panama Canal was envisioned nearly 400 years before it was built. King Charles V of Spain ordered a survey made in 1534, after mariners found no access to the Pacific. Many routes and many schemes, some utterly fantastic, were proposed during the next three centuries. In 1879 the French obtained canal rights across Panama, then part of Colombia. After twenty-five years of fighting disease and working with inadequate tools, the French gave up. The United States interested in a canal since 1825, bought the French rights for \$40,000,000 and set to work. As a result of the transaction, Panama, with U. S. backing, won independence from Colombia.

The canal collected more than \$500,000,000 in tolls in its first twenty years. Only U. S. Navy craft pass through free. The largest vessels using the canal, foreign battleships, pay over \$20,000 for the ocean-to-ocean transit—a bargain since it would cost them more than that in time and money to go around South America.

High water in Gatun Lake is eighty-five feet above sea level. From Caribbean to Pacific, the locks which make this climb and descent are Gatun Locks, Pedro Miguel Locks and Miraflores Locks, which have a

tal of six steps or levels. The locks are 100 feet long and 110 feet wide. Gatun dam is the third largest earth dam in the world, and Gatun Lake, which it creates, is the world's second largest artificial body of water. Because of the curve of the isthmus, the Pacific end of the canal is twenty-seven miles east of the Caribbean end.

The canal's biggest peacetime year was 1929, when it averaged seventeen ships a day and collected a total toll of \$27,111,125. In 1939 Congress authorized a \$277,000,000 construction of new locks parallel to the present ones, but 1,200 feet long and 140 feet wide to permit the handling of vessels not barred because of their size. Construction work, begun in 1940, was halted by the war.

Hawaii

Hawaii, a volcanic-coral island group about three times the size of Delaware, grows 90 percent of the world's pineapple but it won a far sharper fame on Dec. 7, 1941, when the Japanese attacked Pearl Harbor, the U. S. Navy's greatest base, near Honolulu, the Hawaiian capital. Throughout World War II, virtually all of the territory's normal life was subordinated to its role as the military and naval springboard for America's war in the Pacific.

Hawaii is 2,394 miles southwest of San Francisco. The group is a 390-mile chain of islands and eight main islands—Hawaii, Molokai, Maui, Lanai, Molokai, Oahu, Kauai, and Niihau. Largest in size but not longest geologically is Hawaii. Its highest peak, Mauna Kea, rises to 13,784 feet and in a sense, the world's highest mountain since it springs from an ocean floor 10,000 feet below sea level. Kilauea, on Hawaii, is the world's largest active volcano. The islands have no snakes and their only native mammal is a small bat, but there are more than a hundred species of birds.

Hawaii's temperature seldom exceeds the extremes of 56 and 88 degrees, and the land is fertile for all sorts of tropical and subtropical fruits and vegetables. The islands are one of the world's largest producers of cane sugar, and also grow coffee, pineapples, cotton, bananas, nuts, and potatoes. Much of the crop land is irrigated. Some livestock is raised. The main mineral products are building stone, lime and salt. Aside from food processing, Hawaiian manufacturing is limited to small iron works and cement making.

In normal times, the tourist business is Hawaii's third biggest source of income. Among its world-famous ingredients are Waikiki Beach, distinctive native music, surf-board riding, a native dance called hula-hula and the flower garlands known as leis.

Today the most highly organized of

U. S. territories and clearly on record (1940) as applying for statehood, Hawaii was named the Sandwich Islands in 1778 by its discoverer, Captain James Cook, an Englishman. It was ruled by native monarchs and proclaimed a republic in 1894 after Queen Liliuokalani was driven from the throne. It ceded itself to the United States in 1898 and became a territory in 1900. Inter-marriage has reduced the pure Hawaiian race to about 14,000 persons, with Caucasians and Japanese the largest elements among the territory's 1945 population of 502,122. Hawaii's Governor is appointed by the President to a four-year term and there is a locally-elected two-house legislature. Hawaii's delegate to the House of Representatives in Washington has floor privileges but no vote.

The modern and beautiful city of Honolulu is, technically, the most-spread-out city in the world. Part of it, for administrative purpose, is Palmyra, a coral atoll, 960 miles to the south. Hilo, Kahului, Ahukini and Port Allen are minor island ports. In a normal year Hawaii exports over 100 million dollars worth of sugar, pineapple, canned tuna, fiber board and other products, while importing about 135 million dollars worth of manufactured goods.

Puerto Rico

Puerto Rico, a 95-mile-long U. S. dependency at the northeast head of the Caribbean Sea, is a big cane sugar and rum producer and a humanity-packed island with a population density exceeded in U. S. records only by Rhode Island and New Jersey. Its density rate of about 550 persons per square mile has forced not only the cultivation of some of its interior mountain slope nearly to the summits, but also legalization, in 1937, of publicity for birth control.

Sugar, rum, needlework, cigars, citrus fruits, coconuts, coffee, molasses, pineapples, rugs, rope and buttons are the chief exports of the 35-mile-wide island which was discovered by Columbus and conquered for Spain in 1509 by Ponce de Leon. The United States seized Puerto Rico in 1898 in the Spanish-American War. The island is administered by a Governor appointed by the President, and by a locally-elected Congress. It has a Resident Commissioner in Washington with a voice in the House of Representatives, but no vote. Puerto Ricans have long agitated for a change in their political status, some wanting merely more autonomy and some demanding complete independence.

About 75 percent of the population is white and 25 percent Negro. The Roman Catholic religion is predominant. While Spanish is the popular language, English

is spoken by most residents and especially by the younger generations, which have benefited from probably the best school system in Latin America. San Juan, Ponce and Mayaguez are the leading cities. San Juan, the capital and largest city, has a fine harbor, overlooked by Morro Castle and San Cristobal, the ancient forts built by the Spanish to guard the port.

Virgin Islands

The Virgin Islands, a U. S. dependency east of Puerto Rico, are notable for making rum and entertaining tourists. They consist of about fifty islets and three main islands—St. Thomas, St. Croix, and St. John—with an area of 132 square miles. The hilltops and sandy beaches, today favored winter tourist spots, once were hangouts of pirates.

Columbus discovered the group in 1493 and named them for St. Ursula and the Eleven Thousand Virgins. The first recorded settlement was on St. Croix in 1621. The Danes took over the islands in 1671. The United States bought them from Denmark for \$25,000,000 in 1917.

The Virgin Islands' population has declined from 43,178 in 1835 to 24,889 in 1940. About 70 percent of the population today is Negro. Charlotte Amalie, the capital, on St. Thomas, was named for a Danish princess. St. Croix grows most of the cane sugar that goes into rum, while St. Thomas also makes bay rum. There is limited farming, fishing and cattle raising. Vegetables, citrus fruits, and coconuts are raised. Virgin Islanders have U. S. citizenship and are ruled by a Governor appointed by the President and municipal councils elected locally. English is the prevailing language.

Guam

A volcanic island about the area of Chicago, Guam was the first U. S. Pacific outpost to fall to the Japanese in 1941. Thirty miles in length, from four to eight miles in width, the island lies 1,500 miles east of the Philippines, 5,100 miles west by south of San Francisco. Its native inhabitants are about 23,000 Chamorros, far outnumbered by American military and civilian personnel quartered on the island.

Magellan discovered Guam in 1521. The first Spanish missionaries landed in 1668 and many of the priests and their soldier escorts met violent death in clashes with the natives. By 1710, war and pestilence had cut the native population to 3,678. The United States acquired Guam in the Spanish-American War and put it under Navy Department administration. The Japanese had little trouble seizing Guam on Dec. 12,

1941, and held it until U. S. troops stormed back in July 1944.

Guam's exports, worth \$84,278 in 1941, consist almost entirely of copra (dried coconut meat) and coconut oil. For local consumption, the Guamians grow bananas, pineapple, corn, alligator pears, sweet potatoes and many fruits.

Agana, the capital, with about 12,000 normal population, was a modern little city with all conveniences until it was virtually wrecked in the 1944 fighting. English is the official language but many natives cling to the ancient Chamorro, long since corrupted by borrowed words and constructions. The U. S. government provides good schools under native teachers, and also teaches many crafts ranging from carpentry to cooking.

Two-thirds of Guam's annual sixty-nine inches of rain falls in July and September. The temperature ranges from 70 to 91 degrees, with May and June the hottest months. Occasional severe typhoons ruin crops and flatten huts. Guamians, whose island of 224 square miles is divided into fifteen municipalities, are U. S. nationals but not citizens.

American Samoa

American Samoa, a group of seven main volcanic or coral islands in the South Pacific, became U. S.-owned in piecemeal fashion between 1900 and 1929 when Congress accepted cession of them by their native chiefs. This trend had begun in 1872 when the port of Pago Pago on Tutuila Island, the largest of the group, was ceded to the United States for a Naval and coal-
ing station.

Tutuila is eighteen miles long, with maximum width of six miles, and is largely mountainous. Pago Pago, the capital, is 4,610 miles from San Francisco. The total area of the group is seventy-six square miles, a little larger than Cincinnati, and the 1940 population was 12,908. The climate is tropical with a heavy rainy season from December to March. American Samoa exports annually about 1,100 tons of copra (dried coconut meat) and also taro, yams, breadfruit, pineapples, oranges and bananas. The greatest source of native income is from the making of floor and table mats and hula skirts.

The officer commanding the Samoan Naval station administers the islands, under a system extending jurisdiction down to local native chiefs. The natives, Polynesians of a high type, are on the increase because foreigners are forbidden to buy their land. They read and write and are Christians of various denominations. The islands have thirty-six public schools with about 3,000 enrollment, and six private schools under missionaries.

Tabulated Data on State Governments

Source: The Council of State Governments.

State	Governor		Legislature				Limit on reg. session	Salaries of members	
	Term	Salary	Membership Sen.	Rep.	Term Sen.	Rep.			Meets
Alabama.....	4*	\$6,000	35	106	4	4	Biennial	60 days	\$10 per day
Alaska.....	2	10,000	19	58	2	2	Biennial	60 days	\$8 per day
Arizona.....	2	6,000	35	100	4	2	Biennial	60 days	\$1,000 for term; \$1,100 for speaker of House
California.....	4	10,000	40	80	4	2	Biennial	none	\$100 monthly during term
Colorado.....	2	10,000	35	65	4	2	Biennial	none	\$1,000 per regular session
Connecticut.....	2	12,000	36	272	2	2	Biennial	†	\$300 per regular session
Delaware.....	4	7,500	17	35	4	2	Biennial	60 days	\$10 per day
Florida.....	4*	9,000	38	95	4	2	Biennial	60 days	\$6 per day
Georgia.....	4*	7,500	52	205	2	2	Biennial	70 days	\$7 per day
Idaho.....	2	7,500	44	49	2	2	Biennial	60 days	\$5 per day
Illinois.....	4	12,000	51	153	4	2	Biennial	none	\$3,500 per session
Indiana.....	4*	8,000	50	100	4	2	Biennial	61 days	\$10 per day
Iowa.....	2	7,500	50	108	4	2	Biennial	none	\$1,000 per regular session
Kansas.....	2	8,000	40	125	4	2	Biennial	none	\$3 per day
Kentucky.....	4*	10,000	38	100	4	2	Biennial	60 days	\$10 per day
Louisiana.....	4	12,000	39	100	4	4	Biennial	60 days	\$10 per day
Maine.....	2	5,000	33	151	2	2	Biennial	none	\$600 per session
Maryland.....	4	4,500	29	123	4	4	Biennial	90 days	\$5 per day
Massachusetts.....	2	10,000	40	240	2	2	Annual	none	\$2,000 per year; \$4,000 pres. Senate; \$4,000 speaker House
Michigan.....	2	7,500	32	100	2	2	Biennial	none	\$3 per day
Minnesota.....	2	8,500	67	131	4	2	Biennial	90 days	\$1,000 per regular session
Mississippi.....	4*	7,500	49	140	4	4	Biennial	none	\$1,000 per regular session
Missouri.....	4*	10,000	34	150	4	2	Biennial	none	\$5 per day for 70 days, then \$1 per day
Montana.....	4	7,500	56	90	4	2	Biennial	60 days	\$10 per day
Nebraska.....	2	7,500		43†		2	Biennial	none	\$800 per session
Nevada.....	4	7,000	17	40	4	2	Biennial	60 days	\$10 per day
New Hampshire.....	2	5,000	24	399	2	2	Biennial	none	\$200 per session; presiding officers \$250 per session
New Jersey.....	3*	20,000	21	60	3	1	Annual	none	\$500 per year
New Mexico.....	2	10,000	24	49	4	2	Biennial	60 days	\$5 per day
New York.....	4	25,000	56	150	2	2	Annual	none	\$2,500 per year
North Carolina.....	4*	10,500	50	120	2	2	Biennial	none	\$500 per session; presiding officers \$700 per session
North Dakota.....	2	6,000	49	113	4	2	Biennial	60 days	\$5 per day
Ohio.....	2	10,000	33	136	2	2	Biennial	none	\$1,000 per year
Oklahoma.....	4*	6,500	44	120	4	2	Biennial	none	\$6 per day for 60 days, then \$2 per day
Oregon.....	4	7,500	30	60	4	2	Biennial	50 days	\$3 per day
Pennsylvania.....	4*	18,000	50	208	4	2	Biennial	none	\$3,000 per session
Rhode Island.....	2	8,000	44	100	2	2	Annual	none	\$5 per day; 60 days only
South Carolina.....	4*	7,500	46	124	4	2	Annual	none	\$400 per session
South Dakota.....	2	3,000	35	75	2	2	Biennial	60 days	\$5 per day
Tennessee.....	2	8,000	33	99	2	2	Biennial	none	\$4 per day
Texas.....	2	12,000	31	150	4	2	Biennial	none	\$10 per day for 120 days; then \$5 per day
Utah.....	4	6,000	23	60	4	2	Biennial	60 days	\$4 per day
Vermont.....	2	7,000	30	246	2	2	Biennial	none	\$400 per regular session
Virginia.....	4*	10,000	40	100	4	2	Biennial	60 days	\$720 per session
Washington.....	4	6,000	46	99	4	2	Biennial	60 days	\$5 per day and mileage
West Virginia.....	4*	10,000	32	94	4	2	Biennial	60 days	\$500 per year
Wisconsin.....	2	10,000	33	100	4	2	Biennial	none	\$2,400 per session
Wyoming.....	4	8,000	27	56	4	2	Biennial	40 days	\$12 per day

† Not eligible to succeed himself.

* First Wednesday after first Monday in June following organization.

† Unicameral legislature.

November 3, 1794

William Cullen Bryant born. He wrote "Thanatopsis" at the age of 18. He was editor, and later also owner, of the New York Evening Post from 1826 to his death in 1878, probably a record for continuous editorship.—F. P. A.

On the Futility of Human Endeavor

"Man wants but little here below."
 'Tis thus the poet* sets it;
 And, as too many of us know,
 He generally gets it.

*Goldsmith.—F. P. A.

UNITED STATES GEOGRAPHIC DATA

Source: U. S. Geological Survey and U. S. Bureau of the Census.

Land area of continental United States	2,977,128 sq. mi.
Water area of continental United States	45,259 sq. mi.
Total	3,076,789 sq. mi.
Average area of the 48 states	63,057 sq. mi.
Highest point: Mount Whitney, Calif. ¹	14,496 ft.
Lowest point: Death Valley, Calif. ²	276 ft. below sea level
Most northern point: Lake of the Woods extension, Minn.	49° 23' N. lat.
Most southern point: Cape Sable, Fla.	25° 07' N. lat.
Most eastern point: West Quoddy Head, Maine	66° 57' W. long.
Most western point: Cape Alava, Wash.	124° 44' W. long.
Places farthest apart: Cape Flattery, Wash. to a point on the Florida coast south of Miami.	2,835 mi.
Geographic center: near Lebanon, Smith County, Kans.	{ 39° 50' N. lat. 98° 35' W. long.

¹Inland waters only; 74,364 sq. mi. of the U. S. waters in Great Lakes, Gulf of Mexico, etc., not included in the total area.

²The highest and lowest points in the United States are 86 miles apart.

UNITED STATES FISHERIES RESOURCES

Source: U. S. Department of the Interior.

Region	Fish and fish products	Average "normal" catch in millions of pounds
North Atlantic	Haddock, cod, flounders, herring, mackerel, lobster, oysters, clams. Fillet and frozen fish.	676
Middle Atlantic	Flounders, butterfish, whiting, oysters, crabs. Fish meal and oil.	684
South Atlantic and Gulf Coast	Shrimp, mullet, menhaden, Spanish mackerel, snappers. Fish meal and oil, canned fish.	576
Interior U. S.	Whitefish, catfish, trout.	175
South Pacific	Sardines, tuna, canned fish. Fish meal and oil.	1,173
North Pacific	Salmon, halibut, shark, crabs, oysters. Canned and frozen fish, vitamin oils.	289

FOREST RESOURCES OF THE UNITED STATES

The forests of the United States include over 800 different kinds of trees and still cover millions of acres. But since the days when half of the United States was forest the amount of forest land has decreased by about half and the condition of the remaining forests has deteriorated badly, necessitating a reforestation program.

United States Forest Land, 1940 (in acres)

Old growth	100,832,000
Second growth timber	112,030,000
Cordwood	100,791,000
Fair-satisfactory restock growth	71,306,000
Poor-nonrestocking growth	76,738,000
Total	461,697,000

GREAT SALT LAKE

The Great Salt Lake, largest and best known salt lake in the United States, now covers 1,500 square miles, less than one-tenth its original area. The original lake was formed by the melting of glacial ice. Now, the rivers flowing into it are not sufficient to balance the water lost by evaporation and consequently the lake is shrinking. Its depth varies from 15 to 25 feet.

The saltiness of the Great Salt Lake is

caused by the accumulation of mineral salts from the "fresh" water of the rivers that feed it. Since only pure water evaporates, these salts accumulate. The waters of the lake are believed to contain 400 million tons of sodium chloride (table salt) and 30 million tons of sodium sulfate, plus other chemicals. The Great Salt Lake is about six times as salty as the ocean. It is impossible for a person to sink in its dense water.

THE GREAT LAKES

	Superior	Michigan	Huron	Erie	Ontario
Area in U. S.	20,710 sq. mi.	22,400 sq. mi.	9,110 sq. mi.	4,990 sq. mi.	3,560 sq. mi.
in Canada	11,110 sq. mi.	.....	13,900 sq. mi.	4,950 sq. mi.	3,980 sq. mi.
Total	31,820 sq. mi.	22,400 sq. mi.	23,010 sq. mi.	9,940 sq. mi.	7,540 sq. mi.
Length,					
maximum	350 mi.	307 mi.	206 mi.	241 mi.	193 mi.
width,					
maximum	160 mi.	118 mi.	101 mi.	57 mi.	53 mi.
Elevation	602 ft.	581 ft.	581 ft.	572 ft.	246 ft.
Depth	1,290 ft.	923 ft.	750 ft.	210 ft.	778 ft.

Highest, Lowest, and Average Altitudes in the United States

Source: U. S. Geological Survey.

State	Average elevation, ft.	Highest point	Elevation, ft.	Lowest point	Elevation, ft.
Alabama	500	Cheaha Mountain.....	2,407	Gulf of Mexico.....	Sea level
Alaska	4,100	Humphreys Peak.....	12,611	Colorado River.....	100
Arizona	650	Blue Mountain.....	2,800	Quachita River.....	55
		Magazine Mountain.....			
California	2,900	Mount Whitney.....	14,495	Death Valley.....	280*
Colorado	6,800	Mount Elbert.....	14,431	Arkansas River.....	3,350
Connecticut	500	Bear Mountain.....	2,355	Long Island Sound.....	Sea level
Delaware	60	Centerville.....	440	Atlantic Ocean.....	Sea level
Florida	100	Iron Mountain.....	325	Atlantic Ocean.....	Sea level
Georgia	600	Brasstown Bald.....	4,768	Atlantic Ocean.....	Sea level
Idaho	5,000	Borah Peak.....	12,655	Snake River.....	720
Illinois	600	Charles Mound.....	1,241	Mississippi River.....	279
Indiana	700	Greensfork Township.....	1,240	Ohio River.....	316
Iowa	1,100	North boundary.....	1,675	Mississippi River.....	477
Kansas	2,000	On west boundary.....	4,135	Verdigris River.....	700
Kentucky	750	Big Black Mountain.....	4,150	Mississippi River.....	257
Louisiana	100	Benchmark at Athens (old).....	469	New Orleans.....	5*
Maine	600	Mount Katahdin.....	5,268	Atlantic Ocean.....	Sea level
Maryland	350	Backbone Mountain.....	3,340	Atlantic Ocean.....	Sea level
Massachusetts	500	Mount Greylock.....	3,505	Atlantic Ocean.....	Sea level
Michigan	900	Porcupine Mountains.....	2,023	Lake Erie.....	572
Minnesota	1,200	Misquah Hills.....	2,230	Lake Superior.....	602
Mississippi	300	Near Iuka, Knob triangulation station.....	806	Gulf of Mexico.....	Sea level
Missouri	800	Taum Sauk Mountain.....	1,172	St. Francis River.....	230
Montana	3,400	Granite Peak.....	12,850	Kootenai River.....	1,800
Nebraska	2,600	Southwest part of state.....	5,300	Southeast corner of State.....	825
Nevada	5,500	Boundary Peak, White Mountain.....	13,145	Colorado River.....	470
New Hampshire	1,000	Mount Washington.....	6,288	Atlantic Ocean.....	Sea level
New Jersey	250	High Point.....	1,801	Atlantic Ocean.....	Sea level
New Mexico	5,700	North Turchaz Peak.....	13,306	Red Bluff.....	2,876
New York	1,000	Mount Marcy.....	5,344	Atlantic Ocean.....	Sea level
North Carolina	700	Mount Mitchell.....	6,684	Atlantic Ocean.....	Sea level
North Dakota	1,900	Black Butte.....	3,468	Pembina.....	790
	850	Campbell Hill.....	1,550	Ohio River.....	425
Ohio	1,300	Black Mesa.....	4,978	Red River.....	300
Oregon	3,300	Mount Hood.....	11,253	Pacific Ocean.....	Sea level
Pennsylvania	1,100	Negro Mountain.....	3,213	Delaware River.....	Sea level
Rhode Island	200	Durfee Hill.....	805	Atlantic Ocean.....	Sea level
South Carolina	350	Sassafras Mountain.....	3,548	Atlantic Ocean.....	Sea level
South Dakota	2,200	Harney Peak.....	7,242	Big Stone Lake.....	962
	900	Clingmans Dome.....	6,642	Mississippi River.....	182
Tennessee	1,700	Guadalupe Peak.....	8,751	Gulf of Mexico.....	Sea level
Texas	6,100	Kings Peak.....	13,498	Beaverdam Creek.....	2,000
Mont.	1,000	Mount Mansfield.....	4,393	Lake Champlain.....	95
Utah	950	Mount Rogers.....	5,719	Atlantic Ocean.....	Sea level
Vermont	1,700	Mount Rainier.....	14,408	Pacific Ocean.....	Sea level
Virginia	1,500	Spruce Knob.....	4,860	Potomac River.....	240
Wisconsin	1,050	Rib Hill.....	1,940	Lake Michigan.....	581
Wyoming	6,700	Cannett Peak.....	13,785	Belle Fourche River.....	3,100

*Below sea level.

Climate of Selected U. S. Cities

Source: *Climate and Man*, U. S. Department of Agriculture.

City	Temperature, °F.				Growing season, days	Annual precipitation, in.
	Jan. avg.	July avg.	Maximum	Minimum		
Alabama						
Birmingham.....	46.5	80.0	107	-10	240	54.08
Mobile.....	52.8	81.6	103	-1	298	60.67
Arizona						
Tucson.....	49.6	85.1	111	6	245	11.16
Arkansas						
Little Rock.....	42.6	81.2	110	-12	241	46.12
California						
Crescent City.....	45.9	59.3	102	19	230	75.87
Los Angeles.....	54.2	70.5	109	28	359	14.76
San Francisco.....	49.8	58.9	101	27	356	20.23
Colorado						
Denver.....	32.0	72.5	105	-29	171	13.99
Grand Junction.....	25.0	77.9	105	-21	191	8.76
Connecticut						
Hartford.....	27.9	72.5	101	-24	182	42.86
Florida						
Miami.....	68.0	81.7	96	27	...	59.18
Tampa.....	61.8	81.6	98	19	348	48.35
Key West.....	69.9	83.2	100	41	...	38.36
Georgia						
Savannah.....	52.7	81.2	105	8	273	44.67
Atlanta.....	44.0	78.5	103	-8	231	47.58
Idaho						
Boise.....	30.4	74.2	121	-28	177	12.47
Illinois						
Chicago.....	25.7	73.9	105	-23	196	31.85
Springfield.....	28.2	78.0	110	-24	194	34.59
Indiana						
Indianapolis.....	29.5	76.3	106	-25	192	38.26
Iowa						
Fort Dodge.....	17.3	74.4	110	-35	152	31.64
Kansas						
Topeka.....	29.5	79.5	114	-25	195	32.27
Kentucky						
Lexington.....	34.1	76.4	108	-20	189	41.12
Louisiana						
New Orleans.....	53.5	80.1	102	7	292	59.72
Maine						
Bangor.....	22.9	70.8	104	-28	150	39.52
Massachusetts						
Boston.....	29.8	72.4	104	-18	199	38.94
Michigan						
Sault St. Marie.....	14.2	64.1	98	-37	142	28.85
Detroit.....	25.5	73.1	105	-24	177	31.04
Minnesota						
Minneapolis.....	13.1	73.2	108	-34	171	27.31
Mississippi						
Jackson.....	49.0	81.5	107	3	234	51.29
Missouri						
Kansas City.....	30.2	80.0	113	-22	204	35.73
St. Louis.....	32.9	80.2	110	-22	210	36.67
Montana						
Helena.....	20.2	65.7	103	-42	153	12.54
Nebraska						
Omaha.....	23.7	78.1	114	-32	189	25.49
North Platte.....	25.2	75.4	108	-35	160	18.20
Nevada						
Reno.....	32.5	71.0	106	-19	155	7.73
New Hampshire						
Concord.....	22.0	69.7	102	-32	153	36.24
New Jersey						
Atlantic City.....	34.8	72.9	104	-9	215	40.91
New Mexico						
Albuquerque.....	34.1	76.7	104	-10	198	8.40

City	Temperature, °F.				Growing season, days	Annual precipitation, in.
	Jan. avg.	July avg.	Maximum	Minimum		
York						
Albany	24.6	73.2	104	—24	174	33.11
Buffalo	25.8	70.1	97	—20	180	32.77
New York	32.1	74.4	102	—14	211	41.63
h Carolina						
Durham	41.6	78.7	105	6	201	40.97
h Dakota						
Bismarck	9.4	70.9	114	—45	140	15.43
Cleveland	28.3	72.4	100	—17	203	31.89
Columbus	30.5	75.4	106	—20	187	34.10
homa						
OKlahoma City	37.6	81.6	113	—17	224	31.15
on						
Portland	39.4	66.7	105	—2	263	39.43
sylvania						
Pittsburgh	31.6	74.2	103	—20	183	34.77
Philadelphia	34.4	76.7	106	—11	211	41.86
h Carolina						
h Charleston	49.9	81.4	104	7	285	40.26
n Dakota						
Pierre	17.6	76.3	115	—40	161	16.21
esssee						
Nashville	39.9	79.3	106	—13	214	44.77
s						
Brownsville	59.8	83.6	104	12	330	26.26
Dallas	45.8	83.7	110	—3	244	33.60
El Paso	45.4	81.4	106	—5	238	8.56
Amarillo	35.3	76.8	106	—16	205	20.96
Salt Lake City	30.1	77.0	105	—20	192	15.79
nia						
Norfolk	42.4	78.3	105	2	242	40.45
ington						
Seattle	39.5	63.1	98	3	255	31.80
Spokane	27.5	69.0	108	—30	184	14.62
nsin						
Madison	16.7	72.1	107	—29	171	30.60
ing						
asper	26.4	72.1	109	—41	133	14.99

Tidal Shore Lines of the U. S.

State	Mainland	Islands	Total
State			
Alaska	558	761	1,319
Alabama	15	5	20
Massachusetts	421	250	671
Island	118	100	218
Connecticut	126	18	144
York	31	798	829
New Jersey	392	368	760
Delaware	13	.....	13
Maryland	140	14	154
Virginia	770	275	1,045
North Carolina	780	500	1,280
South Carolina	1,040	831	1,871
Georgia	281	960	1,241
Florida	166	727	893
Alabama	714	507	1,221
Atlantic Coast	5,565	6,114	11,679
California	174	117	291
Idaho	1,273	1,257	2,530
Mississippi	99	103	202
Indiana	1,122	591	1,713
Illinois	973	709	1,682
Gulf Coast	3,641	2,777	6,418

State	Mainland	Islands	Total
California	1,264	291	1,555
Oregon	429	60	489
Washington	1,037	684	1,721
Pacific Coast	2,730	1,035	3,765
Total	11,936	9,926	21,862

Boundaries of the United States

Source: U. S. Geological Survey.

Boundaries	Miles
Northern: Canada and Great Lakes	3,987
Southern:	
Gulf of Mexico	
tidal coastline	3,641
Mexican boundary	2,013
Eastern: Atlantic tidal coastline	5,565
Western: Pacific tidal coastline	2,730
Total	17,936

THE NATIONAL PARK SYSTEM OF THE UNITED STATES

The National Park System of the United States, administered by the National Park Service, a bureau of the Department of the Interior, embraces a total of 169 areas, containing approximately 20,500,000 acres in federal ownership. Started with the establishment of Yellowstone National Park in 1872, the system includes not only the most extraordinary and spectacular scenic exhibits in the United States proper and in Alaska and Hawaii but also a large number of sites distinguished for their historic or prehistoric importance or scientific interest.

The number and extent of the various types of areas which comprise the system, as of May 18, 1946, are as follows:

Type of area	Number	Federal land, acres	Lands within exterior boundaries not federally owned, acres
National parks	27	11,060,698.50	141,365.77
National historical parks	4	8,155.55	2,124.69
National monuments	86	9,286,512.05	415,184.40
National military parks	11	23,983.44	2,640.37
National battlefield parks	1	684.44	
National battlefield sites	7	248.32	547.65
National historic sites	10	8,176.33	2,171.12
National memorials	9	2,004.63	90.00
National cemeteries	10	217.01	7.50
National parkways	3	55,019.05	45,010.00
National capital parks	1	27,790.36	1,941.00
Total	169	20,473,489.68	611,082.50

The most widely known areas in the system are listed in the following table:

National Parks

Name, location and year established	Area in U. S. ownership, acres	Outstanding characteristics
Glacier (Montana), 1910	997,486.80	Superb Rocky Mountain scenery with numerous glaciers and lakes; forms part of the Waterton-Glacier International Peace Park, established on May 2, 1932.
Grand Canyon (Arizona), 1919	645,084.31	Mile-deep gorge, 4 to 18 miles wide, 217 miles long, of which 105 miles are within the park; fantastically eroded and colored rock masses.
Great Smoky Mountains (North Carolina-Tennessee), 1930	460,882.46	Loftiest range east of the Black Hills and one of the oldest land areas on earth. Outstandingly diversified and luxuriant plant life, often of extraordinary size.
Mammoth Cave (Kentucky), 1936	50,547.51	Historic series of underground passages, 150 miles of which have been explored; beautiful limestone formations; river 360 feet beneath surface; famous for over a century.
Mount McKinley (Alaska), 1917	1,939,199.04	Mount McKinley, highest mountain in North America; large glaciers of the Alaska Range; caribou and mountain sheep.
Mount Rainier (Washington), 1899	241,219.92	Greatest single-peak glacial system in the United States, radiating from the summit and slopes of an ancient volcano; dense forests.
Olympic (Washington), 1938	848,212.30	Finest mountain wilderness of Pacific Northwest.
Rocky Mountain (Colorado), 1915	252,625.87	One of the most magnificent and diversified sections of the Rocky Mountains, with 65 named peaks more than 10,000 feet high.
Sequoia (California), 1890	385,100.13	Great groves of giant sequoia trees, world's largest and probably oldest living things; magnificent High Sierra scenery, including Mount Whitney, highest mountain in United States proper.
Shenandoah (Virginia), 1935	193,472.98	Tree-covered mountains in the heart of the Blue Ridge; scenic Skyline Drive; panoramic views of historic Virginia.
Yellowstone (Wyoming-Montana-Idaho), 1872	2,213,206.55	World's greatest geyser area, with 3,000 geysers and hot springs; spectacular falls and canyon of the Yellowstone River; one of the world's greatest wildlife sanctuaries.
Yosemite (California), 1890	756,294.65	Mountainous region of unusual beauty; Yosemite and other inspiring gorges with sheer granite cliffs; spectacular waterfalls; three groves of giant sequoias.
Zion (Utah), 1919	94,241.06	Multicolored gorge in heart of southern Utah's dramatic desert and canyon country; erosional formations of great height and spectacular carving.

National Monuments

Name, location and year established	Area in U. S. ownership, acres	Outstanding characteristics
Frederica (Georgia), 1945.....	74.53	Fortified settlement established in 1736 by Oglethorpe as English outpost against Florida Spaniards.
McHenry (Maryland), 1939.....	47.64	The successful defense of this fort on Sept. 13-14, 1814, inspired the writing of our national anthem.
George Washington's Home (Virginia), 1930	393.68	Memorial mansion and gardens on the site of Washington's home, Mount Vernon.
Perry's Victory Memorial (Ohio), 1936	14.25	At Put-in Bay Commodore Perry won greatest naval battle of War of 1812; commemorates century of peace between the United States and Canada.
Redwood Forest (Arizona), 1906.....	85,306.00	Most spectacular display of petrified wood known in the world; Indian ruins and petroglyphs; portion of colorful Painted Desert.
Statue of Liberty (New York), 1924....	10.38	Colossal copper statue on Bedloe's Island; a gift of the French Government; commemorates alliance of France and America during American Revolution; universal symbol of freedom and democracy.

National Military Parks

Pittsburg (Pennsylvania), 1895	2,488.17	Battlefield that marks the turning point of the Confederacy; portion of battleground dedicated as burial ground by President Lincoln in his famous Gettysburg Address.
Gettysburg (Virginia), 1926	1,310.41	Scene of the "Battle of the Crater" and of the longest siege in the history of the United States, 1864-1865; about 100 miles of well-preserved earthworks
Shiloh (Tennessee), 1894	3,717.59	Natural park embracing the battlefield of Shiloh near Pittsburg Landing (1862) which prepared the way for Grant's successful siege of Vicksburg; also well-preserved Indian mounds.
Vicksburg (Mississippi), 1899	1,323.56	Remarkably preserved fortifications of 47-day siege of Vicksburg (1863), which gave the North control of the Mississippi River.

National Historic Sites

March to the Sea Campaign (Georgia), 1944	20.96	Marks significant points on the route of Sherman's march from Chattanooga to Atlanta, prelude to the "March to the Sea," which finally trisected the Confederacy.
Federal Hall Memorial (New York), 1893	.49	On this spot, the site of the present Federal Subtreasury Building, stood the famous Federal Hall, the first seat of the new Federal Government, and the scene of many momentous events in the early days of the Republic.
Home of Franklin D. Roosevelt (New York), 1944	33.23	Fine home in the "Hudson River bracketed" style; birthplace, home and "Summer White House" of President Franklin D. Roosevelt.
Independence Hall Custom House (Pennsylvania), 1939	0.79	This building, completed in 1824, is one of the finest American examples of Greek revival architecture; famous as the Second Bank of the United States, which figured prominently in the historic controversy between President Andrew Jackson and the Whigs over national banking policies.
Vanderbilt Mansion (New York), 1940	211.65	Mansion and grounds of the late Frederick W. Vanderbilt overlooking the Hudson River.

National Memorials

Lincoln Memorial (District of Columbia), 1896	0.05	Lincoln died here on April 15, 1865. Has been refurbished to give atmosphere of a typical home of the 1860's.
Great Hill Monument (North Carolina), 1927	314.40	Site of the first sustained flight by a heavier-than-air machine, made by Wilbur and Orville Wright.
Robert E. Lee Memorial (Virginia), 1925	.50	Splendid antebellum home of Robert E. Lee, commander in chief of the Confederate Army.
Emancipation Memorial (District of Columbia), 1922	.61	Classical structure of great beauty with a seated figure, 20 feet high, of the Great Emancipator.
Mount Rushmore (South Dakota), 1929	1,686.40	Colossal figures carved on the face of Mount Rushmore, delineating the features of four great Presidents: George Washington, Thomas Jefferson, Abraham Lincoln and Theodore Roosevelt.
Thomas Jefferson Memorial (District of Columbia), 1943	1.2	Circular colonnaded structure or rotunda in classic style introduced in this country by Jefferson; on interior walls are four panels with inscriptions based upon writings of Jefferson.
George Washington Monument (District of Columbia), 1885	.37	Built in commemoration of George Washington, this monument in the form of an obelisk, is 555 feet high.

National Battlefield Sites

Name and location	Area in U. S. ownership, acres	Pertinent data
Antietam (Maryland), 1890	183.32	Scene of the battle which brought to an end Lee's first invasion of the North in 1862; includes avenues, monument plots, and commands a view of the Burnside Bridge and the sunken road "bloody lane."
White Plains (New York), 1926	.00	Memorials showing the positions held by Washington's army at Battle of White Plains in 1776.

Battleground Cemeteries

(Number: 10; total area: 217.01 acres)

Antietam (Maryland)	11.36	The cemetery is divided into segments, each representing a State. Interments: 4,833 (unidentified, 1,836).
Battleground (District of Columbia)	1.03	On Georgia Ave., between Van Buren and Whittier Sts. Interments: 44.
Fort Donelson (Tennessee), 1867	15.34	Interments: 684.
Fredericksburg (Virginia), 1865	12.00	Interments: 15,260.
Gettysburg (Pennsylvania), 1863	15.55	Interments: 3,785.
Poplar Grove (Virginia), 1866	8.72	Cemetery is on camping ground of the 50th Regiment of New York Engineers. Interments: 6,265 (unidentified, 2,163).
Shiloh (Tennessee), 1866	10.25	Burial place of men who fell at battle of Shiloh and the surrounding area. Interments: 3,653 (unidentified, 2,417).
Stones River (Tennessee), 1865	20.09	Interments: 6,179 (unidentified, 2,560).
Vicksburg (Mississippi), 1865	119.76	Two miles north of city on Highway 61. Includes many who died within a radius of 150 miles from Vicksburg during the War between the States. Interments: 17,450 (unidentified, 12,911).
Yorktown (Virginia), 1866	2.91	Interments: 2,204 (unidentified, 1,446).

Elevations of Leading U. S. Health or Pleasure Resorts

Location	Feet	Location	Feet
Albuquerque, New Mexico	4,950	Lake Winnepesaukee, New Hampshire	500
Asheville, North Carolina	1,985	Las Vegas, New Mexico	6,711
Atlanta, Georgia	1,032	Little Rock, Arkansas	300
Atlantic City, New Jersey	21	Los Angeles, California	300
Bar Harbor, Maine	240	Luray, Virginia	810
Carlsbad, New Mexico	3,102	Marfa, Texas	4,690
Carson City, Nevada	4,660	Miami, Florida	10
Chautauqua Lake, New York	1,308	Monterey, California	260
Cheyenne, Wyoming	6,060	Moosehead Lake, Maine	1,020
Coeur d'Alene Lake, Idaho	2,131	Natural Bridge, Virginia	730
Colorado Springs, Colorado	5,980	Niagara Falls, New York	600
Concord, New Hampshire	244	Onelda Lake, New York	370
Crawford Notch, New Hampshire	1,891	Palm Beach, Florida	20
Delaware Water Gap, Pennsylvania	350	Pasadena, California	820
Denver, Colorado	5,280	Pensacola, Florida	30
Flagstaff, Arizona	6,894	Phoenix, Arizona	1,080
Glenwood Springs, Colorado	5,748	Reno, Nevada	4,490
Grand Canyon Hotel, Arizona	6,866	St. Petersburg, Florida	40
Hot Springs, Arkansas	607	Salt Lake City, Utah	4,390
Hot Springs, South Dakota	3,443	San Angelo, Texas	1,840
Hot Springs, Virginia	2,195	San Antonio, Texas	660
Jackson Lake, Wyoming	6,733	San Bernardino, California	1,040
Keene, New Hampshire	487	Santa Barbara, California	500
Lake Champlain, New York	95	Sante Fe, New Mexico	6,950
Lake Erie	572	Saranac Lake, New York	1,530
Lake George, New York	322	Saratoga Springs, New York	310
Lake Hopatcong, New Jersey	926	Schroon Lake, New York	800
Lake Huron	581	Sebago Lake, Maine	270
Lake Michigan	581	Skyland, Virginia	3,600
Lake Ontario	246	Tampa, Florida	10
Lake Placid, New York	1,864	Tucson, Arizona	2,370
Lake Superior	602	Tupper Lake, New York	1,550
Lake Tahoe, California-Nevada	6,225	White Sulphur Springs, W. Va.	1,910

A Brief Summary of Naturalization Requirements and Procedure

Source: Immigration and Naturalization Service.

N applicant for naturalization must have been lawfully admitted to the United States for permanent residence. A person cannot become a citizen if he has been admitted for temporary stay only or if he has entered the United States illegally as a stowaway or as a deserting seaman or otherwise without examination.

Under the laws now in force, only persons belonging to the white race, the Negro race, the Chinese race, and races native to North and South America may become citizens by naturalization.

The first step toward becoming a citizen is to make a declaration of intention, commonly called taking out the first paper. An applicant for the first paper must be at least 18 years old and may take out the first paper at any time after arrival as a permanent resident but cannot apply for a second paper until he has lived in the United States for a specified number of years. An alien may apply for the first paper at any place but must apply for a second paper in a naturalization court in the district in which he lives.

A person cannot become a citizen until he is able to carry on an ordinary conversation in English and write his name (unless physically unable to talk or write).

When applying for the first paper, an applicant must fill out Form N-300 and take with him to the Immigration and Naturalization Service together with three 2 inch photographs. The photographs must have been taken within 30 days of the date of the application and must have a light background, be unmounted, and be retouched. They must show head and shoulders only, front view, without

The law requires that every alien be registered and have an alien registration number. Anyone who does not have such a number must take steps to get one from the United States Immigration and Naturalization Service. The alien registration number must be shown on Form N-300.

A person who was admitted as an immigrant on or after July 1, 1928, but before August 27, 1940, should also have in his possession an "immigrant identification card"; that is, a small green card showing his photograph, description, and certain other information.

After the Government receives and examines the Form N-300, the applicant is notified as to when and where to get the first paper. The clerk of the court fills out the first paper, the declaration of intention, using the information the applicant gave in Form N-300. The applicant must sign the first paper before the clerk

of the court and swear that the statements in it are true.

The applicant pays \$3 to the clerk of the court for the declaration of intention.

The first paper does not make an applicant a citizen, but it serves as proof of his lawful residence and is the first step toward citizenship. Many jobs are not open to aliens unless they have taken out a first paper. A first paper is good for only seven years. If an alien has not applied for his second paper before the end of seven years, he must take out another first paper if he wishes to become naturalized.

Some persons may apply for their second paper without having taken out a first paper and without having to reside in the United States five years. Among them are the following:

The husband or wife of a citizen of the United States.

A person 21 years old, but not yet 22, who came to the United States before he was 16 and has lived here ever since.

A person who lived in the United States for at least five years immediately before July 1, 1920, and who, because of misinformation, had reason to believe that he was a citizen.

A person who serves in time of war in the Army or Navy of the United States and, in certain circumstances, a person who serves in the Army, Navy, or merchant marine of the United States in time of peace.

The procedure for filing a petition for naturalization and becoming a citizen is commonly called taking out the second paper. An alien who is required to have a first paper may file his petition for naturalization as soon as his first paper is two years old, provided by that time he has lived in the United States continuously for five years. One must apply for the second paper before the first paper is seven years old.

An applicant must be at least 20 years old to file a declaration of intention with the petition. An alien filing under a section not requiring a declaration of intention may file a petition upon reaching the age of 18.

If a child under 18 has not derived citizenship through his parents, and one of the parents is a citizen, that parent may file a petition in behalf of the child without a first paper.

An applicant must be able to carry on an ordinary conversation in English and to sign his name (unless physically unable to talk or to write). Some courts require that an applicant for a second paper

must be able to read English; the applicant should find out whether the court in his district has such a requirement.

An applicant must have lived continuously in the United States for the number of years required by law; for aliens who are required to have a first paper, that is five years; they must have lived at least the last six months of that five-year period in the state where they apply for the second paper. For wives and husbands of citizens of the United States and some of the other aliens who do not need a first paper it means one, two, or three years, depending on the date of marriage or other facts of the case. Such persons should get further information on this point from the nearest Immigration and Naturalization office.

An applicant must be a person of good moral character. A person who has a criminal record, especially if it is a recent one, may not be able to become a citizen.

The applicant will be asked questions about the history, government, and constitution of the United States. The federal government has textbooks on citizenship to assist applicants for naturalization in preparing to answer these questions. In many places the public schools conduct citizenship classes. These textbooks are furnished free for the use of applicants for naturalization who are attending such classes or who are studying under the supervision of public-school officials. A list of these books may be obtained by writing to the nearest Immigration and Naturalization office. Persons who are not attending public-school classes may purchase the books at a very small cost from the Superintendent of Documents, Government Printing Office, Washington 25, D. C.

Application for a second paper must be made in the district in which the applicant lives. Application must be made on

Form N-400, which may be obtained from a clerk of the court, a social agency, or the nearest Immigration and Naturalization office.

The applicant must send Form N-400 to the nearest Immigration and Naturalization office and must enclose with it three signed photographs of himself, and his first paper, unless he is among those who do not need a first paper.

The applicant will be notified by the Immigration and Naturalization office when and where to come for his first hearing. The applicant must take with him two citizen witnesses to this hearing. A naturalization examiner questions them separately to make sure the applicant meets the requirements of the naturalization laws. If the examiner is satisfied that the applicant does, he helps him file a petition for naturalization. At this time the applicant pays \$8 to the clerk of the court for the petition and the certificate of naturalization.

Not less than thirty days after the petition was filed, the applicant is notified to appear in the naturalization court for a final hearing to renounce allegiance to the foreign government and to take an oath of allegiance to the United States.

Most judges do not interrogate applicants at this hearing, since a naturalization examiner has already done so, and the judge usually follows the examiner's recommendation in regard to an applicant.

The examiner may recommend that an application for citizenship be granted, denied, or put off until the applicant is better prepared. If the examiner recommends that the petition be denied, notice of this recommendation is sent to the applicant before the case is put on the court calendar for final hearing. The applicant may ask to be examined by the judge in court if he feels that the examiner's recommendation is not just.

Naturalization Statistics, 1907 to 1945

Source: Immigration and Naturalization Service.

Period	Declarations filed	Petitions filed			Aliens naturalized		
		Civilian	Military	Total	Civilian	Military	Total
1907 to 1910.....	526,322	164,036	.....	164,036	111,738	.....	111,738
1911 to 1920.....	2,686,909	1,137,084	244,300	1,381,384	884,672	244,300	1,128,972
1921 to 1930.....	2,709,014	1,827,073	57,204	1,884,277	1,716,979	56,206	1,773,185
1931 to 1940.....	1,369,479	1,612,411	24,702	1,637,113	1,498,573	19,891	1,518,464
1941.....	224,123	277,807	.....	277,807	275,747	1,547	277,294
1942.....	221,796	341,979	1,508	343,487	268,762	1,602	270,364
1943.....	115,664	338,885	38,240	377,125	281,459	37,474	318,933
1944.....	42,368	275,486	50,231	325,717	392,766	49,213	441,979
1945.....	31,195	172,905	23,012	195,917	208,707	22,695	231,402
1941 to 1945.....	635,146	1,407,062	112,991	1,520,053	1,427,441	112,531	1,539,972
1907 to 1945.....	7,926,870	6,147,666	439,197	6,586,863	5,639,403	432,928	6,072,331

Immigration by Country of Origin, 1871 to 1945

Source: Immigration and Naturalization Service.

(Figures are totals, not annual averages.)

Countries	1871 to 1890	1891 to 1910	1911 to 1930	1931 to 1940	1941 to 1945	Total 1820 to 1945
Europe:						
Belgium.....	27,398	59,802	49,592	4,817	2,479	160,684
Bulgaria*.....	.....	39,440	25,478	938	162	66,018
Czechoslovakia.....	.....	.....	105,620	14,393	753	120,766
Denmark.....	119,903	115,516	74,413	2,559	532	335,557
Finland.....	.....	.....	17,447	2,146	395	19,988
France.....	122,670	104,149	111,507	12,623	11,020	606,018
Great Britain:						
England.....	1,082,386	604,743	407,364	21,756	13,101	2,654,292
Scotland.....	237,433	164,657	238,138	6,887	705	734,479
Wales.....	19,271	28,021	26,119	735	139	86,533
Not specified.....	16,310	67	.....	.....	.....	793,741
Germany.....	2,171,152	746,650	556,147	117,621	{ 6,836	6,028,787
Austria†.....	426,688	2,737,973	{ 486,517	.....	.....	4,144,507
Hungary.....	.....	.....	{ 473,373	7,861	732	.....
Greece.....	2,518	183,498	235,285	9,119	1,073	431,681
Ireland.....	1,092,353	727,481	366,772	13,167	1,059	4,593,167
Italy.....	363,068	2,697,770	1,564,839	68,028	935	4,720,158
Netherlands.....	70,242	75,020	70,666	7,150	1,160	254,919
Norway.....	271,909	285,520	134,926	4,740	700	805,555
Poland†.....	64,776	96,720	232,547	17,026	1,675	416,430
Portugal.....	31,060	96,657	119,726	3,329	2,934	258,978
Rumania.....	6,359	64,758	80,957	3,871	387	157,326
Spain.....	9,685	36,666	97,569	3,258	1,215	171,338
Sweden.....	507,698	475,760	192,323	3,965	884	1,218,332
Switzerland.....	110,281	66,101	52,767	5,512	2,155	297,835
Turkey in Europe.....	1,899	83,602	69,336	737	133	156,006
Union of Soviet Socialist Rep.....	252,566	2,102,596	982,943	1,356	192	3,343,539
Yugoslavia.....	.....	.....	50,952	5,835	425	57,212
Other Europe.....	1,683	787	31,094	8,865	1,291	43,855
All Europe.....	7,009,308	11,593,954	6,854,417	348,289	53,066	32,677,701
Asia:						
China.....	184,912	35,404	51,185	4,928	1,368	383,541
India.....	.....	.....	1,886	496	345	10,218
Japan.....	2,419	155,739	117,299	1,948	358	277,949
Turkey in Asia**.....	2,287	104,192	98,554	328	111	205,474
Other Asia.....	2,585	19,468	22,921	7,644	1,186	44,725
All Asia.....	192,203	314,803	291,845	15,344	3,368	921,907
Other Countries:						
Africa†.....	1,215	7,718	14,729	1,750	.....	.....
Australia, Tasmania, and New Zealand.....	16,903	14,715	20,647	2,231	.....	.....
Canada and Newfoundland†.....	776,944	182,537	1,666,700	108,527	.....	.....
Central America†.....	561	8,741	32,928	5,861	.....	.....
Mexico†.....	7,075	47,613	678,291	22,319	.....	.....
Other America.....	.....	.....	31	25	.....	.....
Pacific Islands (not specified).....	6,585	2,274	1,506	780	.....	.....
South America†.....	3,432	18,355	84,114	7,803	.....	.....
West Indies.....	42,999	140,614	198,323	15,502	.....	.....
Other countries.....	1,579	47,586	1,375	.....	.....	.....
Other countries†.....	857,293	470,153	2,698,644	164,798	.....	.....
All countries.....	8,058,804	2,887,552	9,844,906	528,431	56,434	33,599,608

Includes Serbia and Montenegro prior to 1920. Austria included with Germany after 1937.

From 1899 to 1919, Poland is included with Austria-Hungary, Germany, and Russia.

Included in "All other countries" in 1892.

Included in "All other countries" in 1892; in "Other Asia" in 1893 and 1894.

Immigrants from Canada, Newfoundland, and Mexico not reported from 1886 to 1893, inclusive.

Included in "All other countries" in 1892 and 1893.

Includes 32,897 persons returning to their homes in the United States. After 1906, such aliens have been recorded in immigration statistics as nonimmigrants; prior to that year, aliens were recorded by countries whence they came.

U. S. Foreign-born Population by Country of Birth

Country of birth	Foreign-born white					Percent	
	1900	1910	1920	1930	1940	1930	1940
Northwestern Europe							
England.....	840,513	876,455	812,828	808,684	621,975	5.8	5.4
Scotland.....	233,524	261,034	254,567	354,323	279,321	2.5	2.4
Wales.....	93,586	82,479	67,066	60,205	35,360	.4	.3
Northern Ireland.....				178,832	106,416	1.3	.9
Irish Free State (Eire).....	1,615,459	1,352,155	1,037,233	744,810	572,031	5.3	5.0
Norway.....	336,388	403,858	363,862	347,852	262,088	2.5	2.3
Sweden.....	582,014	665,183	625,580	595,250	445,070	4.3	3.9
Denmark.....				179,474	138,175	1.3	1.2
Iceland.....	153,690	181,621	189,154	2,764	2,104	...	...
Netherlands.....	94,931	120,053	131,766	133,133	111,064	1.0	1.0
Belgium.....	29,757	49,397	62,686	64,194	53,958	.5	.5
Luxemburg.....	3,031	3,068	12,585	9,048	6,886	.1	.1
Switzerland.....	115,593	124,834	118,659	113,010	88,293	.8	.8
France.....	104,197	117,236	152,890	135,265	102,930	1.0	.9
Central Europe							
Germany.....	2,663,418	2,311,085	1,686,102	1,608,814	1,237,772	11.5	10.8
Poland.....	383,407	937,884	1,139,978	1,268,583	903,479	9.1	8.7
Czechoslovakia.....			362,436	491,638	319,971	3.5	2.8
Austria.....	432,798	845,506	575,625	370,914	479,906	2.7	4.2
Hungary.....	145,714	495,600	397,282	274,450	290,228	2.0	2.5
Yugoslavia.....			169,437	211,416	161,093	1.5	1.4
Eastern Europe							
Russia (U.S.S.R.).....				1,153,624	1,040,884	8.2	9.1
Latvia.....				20,673	18,636	.1	.2
Estonia.....	423,726	1,184,382	1,400,489	3,550	4,178	...	...
Lithuania.....			135,068	193,606	165,771	1.4	1.5
Finland.....	62,641	129,669	149,824	142,478	117,210	1.0	1.0
Rumania.....	15,032	65,920	102,823	146,393	115,940	1.0	1.0
Bulgaria.....		11,453	10,477	9,399	8,888	.1	.1
Turkey in Europe.....	9,910	32,221	5,284	2,257	4,412	...	...
Southern Europe							
Greece.....	8,515	101,264	175,972	174,526	163,252	1.2	1.4
Italy.....	484,027	1,343,070	1,610,109	1,790,424	1,623,580	12.8	14.2
Spain.....	7,050	21,977	49,247	59,033	47,707	.4	.4
Portugal.....	30,608	57,623	67,453	69,993	62,347	.5	.5
Other Europe.....	2,251	12,851	11,509	25,065	19,819	.2	.2
Asia							
Palestine.....			3,202	6,135	7,047	...	.1
Syria.....		59,702	51,900	57,227	50,859	.4	.4
Turkey in Asia.....			11,014	46,651	52,479	.3	.5
Other Asia.....	120,248	4,612	44,334	47,567	39,524	.3	.3
America							
Canada-French.....	395,126	385,083	307,786	370,852	273,366	2.7	2.4
Canada-other.....	784,796	810,987	810,092	907,660	770,753	6.5	6.7
Newfoundland.....		5,076	13,242	23,971	21,361	.2	...
Mexico.....	103,393	219,802	478,383	639,017	377,433	4.6	3.3
Cuba.....	11,081	12,869	12,843	16,089	15,277	.1	.1
Other West Indies.....	14,354	10,300	13,526	15,511	15,257	.1	.1
Central America.....	3,897	1,507	4,074	7,791	7,638	.1	.1
South America.....	4,733	7,562	16,855	30,333	28,770	.2	.3
All other							
Australia.....	6,807	8,938	10,801	12,720	10,998	.1	.1
Azores.....			33,788	35,432	25,751	.3	.2
Other Atlantic islands.....	9,768	15,795	5,196	4,053	3,232	...	...
Other and not reported.....	15,293	15,434	17,727	18,716	18,649	.1	.2
Total.....	10,341,276	13,345,545	13,712,754	13,983,405	11,419,138	100.0	100.0

Population of the Thirteen States in 1790

State	Population	State	Population	State	Population
Virginia.....	747,610	New York.....	340,120	New Hampshire.....	141,885
Pennsylvania.....	434,373	Maryland.....	319,728	Georgia.....	82,548
North Carolina.....	393,751	South Carolina.....	249,073	Rhode Island.....	68,825
Massachusetts.....	378,787	Connecticut.....	237,946	Delaware.....	59,096
		New Jersey.....	184,139		

Arrival and Departure of Aliens, 1920 to 1945

Source: Immigration and Naturalization Service.

ar	Aliens ad- mitted	Aliens de- parted	Aliens de- barred*	Aliens de- ported*	Net change in population
...	621,576	428,062	11,795	2,762	193,514
...	978,163	426,031	13,779	4,517	552,132
...	432,505	345,384	13,731	4,345	87,121
...	673,406	200,586	20,619	3,661	472,820
...	879,302	216,745	30,284	6,409	662,557
...	458,435	225,490	25,390	9,945	232,945
...	496,106	227,755	20,550	10,904	268,351
...	538,001	253,508	19,755	11,662	284,493
...	500,631	274,356	18,839	11,625	226,275
...	479,327	252,498	18,127	12,908	226,829
...	446,214	272,425	8,233	16,631	173,789
...	280,679	290,916	9,744	18,142	-10,237
...	174,871	287,657	7,064	19,426	-112,786
...	150,728	243,802	5,527	19,865	-93,074
...	163,904	177,172	5,384	8,879	-13,268
...	179,721	189,050	5,558	8,319	-9,329
...	190,899	193,284	7,000	9,195	-2,385
...	231,884	224,582	8,076	8,829	7,302
...	67,895	25,210	8,066	9,275	42,685
...	82,998	26,651	6,498	8,202	56,347
...	70,756	21,461	5,300	6,954	49,295
...	51,776	17,115	2,929	4,407	34,661
...	28,781	7,363	1,833	3,709	21,418
...	23,725	5,107	1,495	4,207	18,618
...	28,551	5,669	1,642	7,179	22,882
...	38,119	7,442	2,341	11,270	30,677

* Included under aliens departed.

Immigration to the United States, 1820 to 1945

Source: U. S. Bureau of the Census.

Year	Immi- grants	Year	Immi- grants	Year	Immi- grants	Year	Immi- grants
1820	8,385	1852	371,603	1884	518,592	1916	298,826
1821	9,127	1853	368,645	1885	395,346	1917	295,403
1822	6,911	1854	427,833	1886	334,203	1918	110,618
1823	6,354	1855	200,877	1887	490,109	1919	141,132
1824	7,912	1856	200,436	1888	546,889	1920	430,001
1825	10,199	1857	251,306	1889	444,427	1921	805,228
1826	10,837	1858	123,126	1890	455,302	1922	309,556
1827	18,875	1859	121,282	1891	560,319	1923	522,919
1828	27,382	1860	153,640	1892	579,663	1924	706,896
1829	22,520	1861	91,918	1893	439,730	1925	294,314
1830	23,322	1862	91,985	1894	285,631	1926	304,488
1831	22,633	1863	176,282	1895	258,536	1927	335,175
1832	60,482	1864	193,418	1896	343,267	1928	307,255
1833	58,640	1865	248,120	1897	230,832	1929	279,678
1834	65,365	1866	318,568	1898	229,299	1930	241,700
1835	45,374	1867	315,722	1899	311,715	1931	97,139
1836	76,242	1868	138,840	1900	448,572	1932	35,576
1837	79,340	1869	352,768	1901	487,918	1933	23,068
1838	38,914	1870	387,203	1902	648,743	1934	29,470
1839	68,069	1871	321,500	1903	857,046	1935	34,956
1840	84,066	1872	404,806	1904	812,870	1936	36,329
1841	80,289	1873	459,803	1905	1,026,499	1937	50,244
1842	104,565	1874	313,339	1906	1,100,735	1938	67,895
1843	52,496	1875	227,498	1907	1,285,349	1939	82,998
1844	78,615	1876	169,986	1908	782,870	1940	70,756
1845	114,371	1877	141,857	1909	751,786	1941	51,776
1846	154,416	1878	138,469	1910	1,041,570	1942	28,781
1847	234,968	1879	177,826	1911	878,587	1943	23,725
1848	226,527	1880	457,257	1912	838,172	1944	28,551
1849	297,024	1881	669,431	1913	1,197,892	1945	38,119
1850	369,980	1882	788,992	1914	1,218,480		
1851	379,466	1883	603,322	1915	326,700		

Population and Area of Continental United States, 1790 to 1940

Source: U. S. Bureau of the Census.

Population	Increase over the preceding census	Area sq. mi.	Pop. per sq. mi.
Number	Percent		
3,929,214	.....	867,980	4.5
5,308,483	1,379,269	867,980	6.1
7,239,881	1,931,398	1,685,865	4.3
9,638,453	2,398,572	1,753,588	5.5
12,866,020	3,227,567	1,753,588	7.3
17,069,453	4,203,433	1,753,588	9.7
23,191,876	6,122,423	2,944,337	7.9
31,443,321	8,251,445	2,973,965	10.6
38,558,371	7,115,050	2,973,965	13.0
50,155,783	11,597,412	2,973,965	16.9
62,947,714	12,791,931	2,973,965	21.2
75,994,575	13,046,861	2,974,159	25.6
91,972,266	15,977,691	2,973,890	30.9
105,710,620	13,738,354	2,973,776	35.5
122,775,046	17,064,426	2,973,776	41.3
131,669,275	8,894,229	2,977,128	44.2

Population of United States, Territories, and Possessions, 1930-1940

Source: U. S. Bureau of the Census.

Area	Population 1930	Population 1940	Per- cent in- crease
Continental United States	122,775,046	131,669,275	7.2
Alaska.....	59,278	72,524	22.3
American Samoa.....	10,055	12,908	28.4
Guam.....	18,509	22,290	20.4
Hawaii.....	368,336	423,330	14.9
Panama Canal Zone.....	39,467	51,827	31.3
Puerto Rico.....	1,543,913	1,869,255	21.1
Virgin Islands.....	22,012	24,889	13.1
Military and naval, etc., services abroad.....	89,453	118,933	33.0
United States, with ter- ritories and possessions	124,926,069	134,265,231	7.5

Note: The Philippine Islands, which became independent on July 4, 1946, had a population of 13,513,000 in 1930 and 16,356,000 in 1940, an increase of 21 percent.

Population by States, 1900, 1920, 1940, and 1945 (estimated)

Source: U. S. Bureau of the Census.

State	1900		1920		1940		1945 (estimated)	
	Population	Rank	Population	Rank	Population	Rank	Population	Rank
Alabama	1,828,697	18	2,348,174	18	2,832,961	17	2,812,301	17
Arizona	122,931	47	334,162	46	499,261	44	630,298	38
Arkansas	1,311,564	25	1,752,204	25	1,949,387	24	1,779,817	29
California	1,485,053	21	3,426,861	8	6,907,387	5	8,822,688	3
Colorado	539,700	32	939,629	33	1,123,296	33	1,120,595	34
Connecticut	908,420	29	1,380,631	29	1,709,242	31	1,786,300	28
Delaware	184,735	45	223,003	47	266,505	47	286,832	47
D. C.	278,718	41	437,571	42	663,091	37	938,458	35
Florida	528,542	33	968,470	32	1,897,414	27	2,385,917	21
Georgia	2,216,331	11	2,895,832	12	3,123,723	14	3,191,766	13
Idaho	161,772	46	431,866	43	524,873	43	500,109	43
Illinois	4,821,550	3	6,485,280	3	7,897,241	3	7,721,099	4
Indiana	2,516,462	8	2,930,390	11	3,427,796	12	3,437,745	12
Iowa	2,231,853	10	2,404,021	16	2,538,268	20	2,259,526	22
Kansas	1,470,495	22	1,769,257	24	1,801,028	29	1,740,379	30
Kentucky	2,147,174	12	2,416,630	15	2,845,627	16	2,578,179	18
Louisiana	1,381,625	23	1,798,509	22	2,363,880	21	2,456,057	20
Maine	694,466	31	768,014	35	847,226	35	785,913	36
Maryland	1,188,044	26	1,449,661	28	1,821,244	28	2,125,419	23
Massachusetts	2,805,346	7	3,852,356	6	4,316,721	8	4,183,179	9
Michigan	2,420,982	9	3,668,412	7	5,256,106	7	5,471,774	7
Minnesota	1,751,394	19	2,387,125	17	2,792,300	18	2,497,485	19
Mississippi	1,551,270	20	1,790,618	23	2,183,796	23	2,080,377	25
Missouri	3,106,665	5	3,404,055	9	3,784,664	10	3,556,693	10
Montana	243,329	43	548,889	39	559,456	40	457,624	44
Nebraska	1,066,300	27	1,296,372	31	1,315,834	32	1,198,492	33
Nevada	42,335	49	77,407	49	110,247	49	159,804	49
New Hampshire	411,588	37	443,083	41	491,524	45	452,174	45
New Jersey	1,883,669	16	3,155,900	10	4,160,165	9	4,200,941	8
New Mexico	195,310	44	360,350	44	531,818	42	535,220	41
New York	7,268,894	1	10,385,227	1	13,479,142	1	12,584,913	1
North Carolina	1,893,810	15	2,559,123	14	3,571,623	11	3,504,626	11
North Dakota	319,146	40	646,872	36	641,935	39	520,935	42
Ohio	4,157,545	4	5,759,394	4	6,907,612	4	6,873,448	5
Oklahoma	790,391	30	2,028,283	21	2,336,434	22	2,034,460	26
Oregon	413,536	36	783,389	34	1,089,684	34	1,206,322	32
Pennsylvania	6,302,115	2	8,720,017	2	9,900,180	2	9,193,957	7
Rhode Island	428,556	35	604,397	38	713,346	36	758,222	37
South Carolina	1,340,316	24	1,683,724	26	1,899,804	25	1,905,597	27
South Dakota	401,570	38	636,547	37	642,961	38	555,347	40
Tennessee	2,020,616	14	2,337,885	19	2,915,841	15	2,878,777	16
Texas	3,048,710	6	4,663,228	5	6,414,824	6	6,786,740	6
Utah	276,749	42	449,396	40	550,310	41	6,616,989	39
Vermont	343,641	39	352,428	45	359,231	46	310,352	46
Virginia	1,854,184	17	2,309,187	20	2,677,773	19	3,079,706	14
Washington	518,103	34	1,356,621	30	1,736,191	30	2,088,574	24
West Virginia	958,800	28	1,463,701	27	1,901,974	26	1,724,677	31
Wisconsin	2,069,042	13	2,632,067	13	3,137,587	13	2,952,205	15
Wyoming	92,531	48	194,402	48	250,742	48	246,766	48

U. S. Indian Population, 1945

Source: Office of Indian Affairs.

Arizona	55,194	Minnesota	18,188	Oklahoma	110,860
California	24,100	Mississippi	2,281	Oregon	5,550
Colorado	958	Montana	18,800	South Dakota	30,740
Florida	675	Nebraska	4,864	Texas	360
Idaho	4,421	Nevada	5,672	Utah	2,440
Iowa	525	New Mexico	43,005	Washington	15,270
Kansas	2,216	New York	9,032	Wisconsin	13,760
Louisiana	128	North Carolina	3,795	Wyoming	2,690
Michigan	5,174	North Dakota	12,863		

Previous years: 1900, 270,644; 1910, 304,950; 1920, 336,337; 1930, 340,541; 1940, 361,816; 1945, 393,622.

Indian Population in Continental United States and Alaska Under Agency Control, 1944

Source: 1944 Census Report.

These data do not represent the actual numbers of Indians residing in each state but number under the jurisdiction of Indian agencies located in the respective states, whether enrolled at agency office or estimated by the Agency Superintendent. The state in which the agency headquarters is located is listed first when the agency extends into two or more states.

District, agency, and state	Number	District, agency, and state	Number
Eastern		VI. California	
(Headquarters, Washington, D. C.)		(Headquarters, Sacramento and San Francisco, California)	
Cherokee, North Carolina.....	3,724	Hoopla Valley, California.....	3,570
Choctaw.....	2,360	Mission, California.....	7,080
New York, New York.....	9,032	Sacramento, California.....	10,901
Seminole, Florida.....	652	Total.....	21,551
Total.....	15,768		
Great Lakes		VII. Inter-Mountain	
(Headquarters, Minneapolis, Minn.)		(Headquarters, Salt Lake City, Utah)	
Consolidated Chippewa, Minnesota.....	14,535	Carson.....	5,725
Great Lakes.....	6,727	Fort Hall.....	2,067
Menominee, Wisconsin.....	2,551	Utah and Ouray.....	1,742
Pipestone, Minnesota.....	978	Western Shoshone.....	1,920
Red Lake, Minnesota.....	2,444	Total.....	11,454
Tomah.....	10,036		
Total.....	37,271		
North Central Plains		VIII. Southwest	
(Headquarters, Pierre, South Dakota)		(Headquarters, Albuquerque, New Mexico, and Phoenix, Arizona)	
Cheyenne River, South Dakota.....	3,803	Colorado River.....	2,249
Crow Creek, South Dakota.....	1,725	Consolidated Ute.....	962
Flandreau, South Dakota.....	281	Fort Apache, Arizona.....	3,150
Fort Berthold, North Dakota.....	1,978	Hopi, Arizona.....	3,558
Fort Totten, North Dakota.....	1,130	Jicarilla, New Mexico.....	805
Pine Ridge, South Dakota.....	9,864	Mescalero, New Mexico.....	850
Rosebud, South Dakota.....	9,361	Navajo.....	53,209
Sisseton.....	3,132	Pima, Arizona.....	6,774
Standing Rock.....	4,259	San Carlos, Arizona.....	3,349
Turtle Mountain, North Dakota.....	7,439	Sells, Arizona.....	6,445
Winnebago, Nebraska.....	4,820	Truxton Canon, Arizona.....	1,247
Total.....	47,792	United Pueblos, New Mexico.....	14,640
		Total.....	97,238
Northwestern Plains		IX. South Central Plains	
(Headquarters, Billings, Montana)		(Headquarters, Oklahoma City and Muskogee, Oklahoma)	
Blackfeet, Montana.....	5,046	Cheyenne and Arapaho, Oklahoma.....	3,062
Crow, Montana.....	2,468	Five Civilized Tribes, Oklahoma.....	83,100
Flathead, Montana.....	3,380	Kiowa.....	7,776
Fort Belknap, Montana.....	1,763	Osage, Oklahoma.....	4,542
Fort Peck, Montana.....	3,074	Pawnee, Oklahoma.....	3,505
Rocky Boy's, Montana.....	858	Potawatomi, Kansas.....	2,211
Tongue River, Montana.....	1,702	Quapaw, Oklahoma.....	3,790
Wind River, Wyoming.....	2,650	Shawnee, Oklahoma.....	5,106
Total.....	20,941	Total.....	113,082
Pacific Northwest		X. Alaska (estimated)	
(Headquarters, Spokane, Washington)		(Headquarters, Juneau, Alaska)	
Colville, Washington.....	4,426	Eskimo.....	15,716
Groand Ronde-Siletz, Oregon.....	1,806	Indian.....	11,385
Jamath, Oregon.....	1,537	Aleut.....	5,649
Northern Idaho.....	2,336	Total.....	32,750
Sholah, Washington.....	3,096	Total, Continental United States.....	387,970
Wulap, Washington.....	4,213	Total, Continental United States and Alaska..	420,720
Matilla, Oregon.....	1,305		
Warm Springs, Oregon.....	855		
Sakima.....	3,299		
Total.....	22,873		

Population and Area of Major U. S. Cities, 1944

(over 50,000 population)

Source: U. S. Bureau of the Census.

Rank	City	Population	Area, sq. mi.	Rank	City	Population	Area, sq. mi.
1	New York, N. Y.	7,454,995	365.4	61	Yonkers, N. Y.	142,598	20.3
	Bronx	1,394,711	54.4	62	Tulsa, Okla.	142,157	22.4
	Brooklyn	2,698,285	88.8	63	Scranton, Pa.	140,404	19.9
	Manhattan	1,889,924	31.2	64	Paterson, N. J.	139,656	8.4
	Queens	1,297,634	126.6	65	Albany, N. Y.	130,577	19.6
	Richmond	174,441	64.4	66	Chattanooga, Tenn.	128,163	27.9
2	Chicago, Ill.	3,396,808	211.3	67	Trenton, N. J.	124,697	7.7
3	Philadelphia, Pa.	1,931,334	135.0	68	Spokane, Wash.	122,001	41.5
4	Detroit, Mich.	1,623,452	142.0	69	Kansas City, Kans.	121,458	20.4
5	Los Angeles, Calif.	1,504,277	452.2	70	Fort Wayne, Ind.	118,410	17.1
6	Cleveland, Ohio	878,336	73.1	71	Camden, N. J.	117,536	9.8
7	Baltimore, Md.	859,100	85.6	72	Erie, Pa.	116,955	18.0
8	St. Louis, Mo.	816,048	65.0	73	Fall River, Mass.	115,428	40.8
9	Boston, Mass.	770,816	65.9	74	Wichita, Kans.	114,966	21.6
10	Pittsburgh, Pa.	671,659	55.1	75	Wilmington, Del.	112,504	17.3
11	Washington, D. C.	663,091	69.2	76	Gary, Ind.	111,719	40.6
12	San Francisco, Calif.	634,536	93.1	77	Knoxville, Tenn.	111,580	25.4
13	Milwaukee, Wis.	587,472	43.4	78	Cambridge, Mass.	110,879	7.0
14	Buffalo, N. Y.	575,901	50.2	79	Reading, Pa.	110,568	8.8
15	New Orleans, La.	494,537	363.5	80	New Bedford, Mass.	110,341	19.4
16	Minneapolis, Minn.	492,370	58.8	81	Elizabeth, N. J.	109,912	13.3
17	Cincinnati, Ohio	455,610	72.4	82	Tacoma, Wash.	109,408	49.1
18	Newark, N. J.	429,760	26.8	83	Canton, Ohio	108,401	14.0
19	Kansas City, Mo.	399,178	59.4	84	Tampa, Fla.	108,391	22.7
20	Indianapolis, Ind.	386,972	53.7	85	Sacramento, Calif.	105,958	13.7
21	Houston, Tex.	384,514	72.8	86	Peoria, Ill.	105,087	13.7
22	Seattle, Wash.	368,302	80.7	87	Somerville, Mass.	102,177	4.2
23	Rochester, N. Y.	324,975	35.3	88	Lowell, Mass.	101,389	14.4
24	Denver, Colo.	322,412	58.7	89	South Bend, Ind.	101,268	19.7
25	Louisville, Ky.	319,077	40.8	90	Duluth, Minn.	101,065	70.9
26	Columbus, Ohio	306,087	39.5	91	Charlotte, N. C.	100,899	19.3
27	Portland, Oreg.	305,394	66.9	92	Utica, N. Y.	100,518	15.8
28	Atlanta, Ga.	302,288	34.7	93	Waterbury, Conn.	99,314	28.2
29	Oakland, Calif.	302,163	60.3	94	Shreveport, La.	98,167	19.2
30	Jersey City, N. J.	301,173	21.5	95	Lynn, Mass.	98,123	10.0
31	Dallas, Tex.	294,734	41.8	96	Evansville, Ind.	97,062	9.7
32	Memphis, Tenn.	292,942	48.5	97	Allentown, Pa.	96,904	16.1
33	St. Paul, Minn.	287,736	54.9	98	El Paso, Tex.	96,810	13.7
34	Toledo, Ohio	282,349	41.3	99	Savannah, Ga.	95,996	11.5
35	Birmingham, Ala.	267,583	50.3	100	Little Rock, Ark.	88,039	17.9
36	San Antonio, Tex.	253,854	35.8	101	Austin, Tex.	87,930	26.3
37	Providence, R. I.	253,504	19.9	102	Schenectady, N. Y.	87,549	10.4
38	Akron, Ohio	244,791	54.1	103	Wilkes-Barre, Pa.	86,236	7.2
39	Omaha, Neb.	223,844	39.3	104	Berkeley, Calif.	85,547	17.2
40	Dayton, Ohio	210,718	23.7	105	Rockford, Ill.	84,637	12.4
41	Syracuse, N. Y.	205,967	25.7	106	Lawrence, Mass.	84,323	7.2
42	Oklahoma City, Okla.	204,424	49.8	107	Harrisburg, Pa.	83,893	9.8
43	San Diego, Calif.	203,341	105.8	108	Saginaw, Mich.	82,794	17.0
44	Worcester, Mass.	193,694	38.3	109	Glendale, Calif.	82,582	20.0
45	Richmond, Va.	193,042	23.0	110	Sioux City, Iowa	82,364	46.2
46	Fort Worth, Tex.	177,662	58.1	111	Lincoln, Nebr.	81,984	24.3
47	Jacksonville, Fla.	173,065	39.4	112	Pasadena, Calif.	81,864	19.4
48	Miami, Fla.	172,172	38.1	113	Altoona, Pa.	80,214	9.0
49	Youngstown, Ohio	167,720	33.1	114	Winston-Salem, N. C.	79,815	15.1
50	Nashville, Tenn.	167,402	22.0	115	Bayonne, N. J.	79,198	11.4
51	Hartford, Conn.	166,267	18.6	116	Huntington, W. Va.	78,836	14.8
52	Grand Rapids, Mich.	164,292	23.0	117	Lansing, Mich.	78,753	11.6
53	Long Beach, Calif.	164,271	32.6	118	Mobile, Ala.	78,720	13.5
54	New Haven, Conn.	160,605	22.5	119	Binghamton, N. Y.	78,309	10.6
55	Des Moines, Iowa	159,819	53.8	120	Montgomery, Ala.	78,084	20.3
56	Flint, Mich.	151,543	29.4	121	Niagara Falls, N. Y.	78,029	15.9
57	Salt Lake City, Utah	149,934	52.5	122	Manchester, N. H.	77,685	33.9
58	Springfield, Mass.	149,554	33.1	123	Quincy, Mass.	75,810	26.4
59	Bridgeport, Conn.	147,121	17.9	124	Pawtucket, R. I.	75,797	9.0
60	Norfolk, Va.	144,332	35.9	125	St. Joseph, Mo.	75,711	14.1

Rank	City	Population	Area, sq. mi.	Rank	City	Population	Area, sq. mi.
162	East St. Louis, Ill.	75,609	13.9	162	Lancaster, Pa.	61,345	3.9
163	Springfield, Ill.	75,503	9.5	163	Springfield, Mo.	61,238	13.6
164	Portland, Maine	73,643	37.8	164	Wheeling, W. Va.	61,099	11.1
165	Charleston, S. C.	71,275	5.9	165	Galveston, Tex.	60,862	34.8
166	Springfield, Ohio	70,662	11.8	166	St. Petersburg, Fla.	60,812	58.1
167	Troy, N. Y.	70,304	10.0	167	Fresno, Calif.	60,685	9.9
168	Hammond, Ind.	70,184	24.4	168	Durham, N. C.	60,195	13.3
169	Newton, Mass.	69,873	17.5	169	Greensboro, N. C.	59,319	18.0
170	Roanoke, Va.	69,287	10.8	170	Decatur, Ill.	59,305	9.5
171	Lakewood, Ohio	69,160	5.6	171	Chester, Pa.	59,285	6.1
172	East Orange, N. J.	68,945	3.9	172	Beaumont, Tex.	59,061	10.5
173	New Britain, Conn.	68,685	13.8	173	Bethlehem, Pa.	58,490	17.8
174	San Jose, Calif.	68,457	14.8	174	New Rochelle, N. Y.	58,408	10.0
175	Charleston, W. Va.	67,914	8.5	175	Malden, Mass.	58,010	4.8
176	Topeka, Kans.	67,883	11.7	176	Macon, Ga.	57,865	8.1
177	Madison, Wis.	67,447	8.1	177	Corpus Christi, Tex.	57,301	13.9
178	Mount Vernon, N. Y.	67,362	4.2	178	York, Pa.	56,712	4.1
179	Racine, Wis.	67,195	8.7	179	Union City, N. J.	56,173	1.3
180	Johnstown, Pa.	66,668	5.6	180	Waco, Tex.	55,982	15.5
181	Pontiac, Mich.	66,626	20.0	181	McKeesport, Pa.	55,355	5.2
182	Davenport, Iowa	66,039	19.8	182	Irrington, N. J.	55,328	3.1
183	Oak Park, Ill.	66,015	4.7	183	Cleveland Heights, Ohio	54,992	8.2
184	Augusta, Ga.	65,919	9.8	184	Stockton, Calif.	54,714	9.9
185	Phoenix, Ariz.	65,414	9.7	185	East Chicago, Ind.	54,637	10.7
186	Evanston, Ill.	63,389	8.2	186	Kalamazoo, Mich.	54,097	8.5
187	Cicero, Ill.	64,712	5.8	187	Holyoke, Mass.	53,750	22.8
188	Atlantic City, N. J.	64,094	16.4	188	Santa Monica, Calif.	53,500	8.0
189	Dearborn, Mich.	63,584	25.1	189	Columbus, Ga.	53,280	6.8
190	Medford, Mass.	63,083	8.6	190	Pueblo, Colo.	52,162	10.2
191	Terre Haute, Ind.	62,693	9.8	191	Waterloo, Iowa	51,743	13.6
192	Columbia, S. C.	62,396	9.0	192	Amarillo, Tex.	51,686	16.4
193	Brockton, Mass.	62,343	21.5	193	Asheville, N. C.	51,310	14.7
194	Cedar Rapids, Iowa	62,120	28.4	194	Highland Park, Mich.	50,810	3.0
195	Jackson, Miss.	62,107	16.1	195	Portsmouth, Va.	50,745	6.9
196	Covington, Ky.	62,018	6.5	196	Hamilton, Ohio	50,592	6.6
197	Passaic, N. J.	61,394	3.2	197	Hoboken, N. J.	50,115	1.6

Density of U. S. Population by State

State	Area, sq. mi.	Population per sq. mi.			State	Area, sq. mi.	Population per sq. mi.		
		1900	1920	1940			1900	1920	1940
Dist. of Columbia	61	4,645.3	7,292.9	10,870.3	Mississippi	47,420	33.5	38.6	46.1
Delaware	1,058	401.6	566.4	674.2	Iowa	55,986	40.2	43.2	45.3
New Jersey	7,522	250.7	420.0	553.1	California	156,803	9.5	22.0	44.1
Massachusetts	7,907	349.0	479.2	545.9	Vermont	9,278	37.7	38.6	38.7
Connecticut	4,899	188.5	286.4	348.9	Arkansas	52,725	25.0	33.4	37.0
New York	47,929	152.5	217.9	281.2	Florida	54,262	9.6	17.7	35.0
Pennsylvania	45,045	140.6	194.5	219.8	Minnesota	80,009	21.7	29.5	34.9
Illinois	9,887	119.5	145.8	184.2	Oklahoma	69,283	11.4*	29.2	33.7
Indiana	41,122	102.1	141.4	168.0	Maine	31,040	23.2	25.7	27.3
Ohio	55,947	86.1	115.7	141.2	Washington	66,977	7.8	20.3	25.9
Wisconsin	1,978	94.0	113.5	134.7	Texas	263,644	11.6	17.8	24.3
Michigan	36,205	70.1	81.3	94.7	Kansas	82,113	18.0	21.6	21.9
Montana	57,022	42.1	63.8	92.2	Nebraska	76,653	13.9	16.9	17.2
Virginia	24,090	39.9	60.9	79.0	Oregon	96,350	4.3	8.2	11.3
North Carolina	49,142	38.9	52.5	72.7	Colorado	103,967	5.2	9.1	10.8
South Carolina	40,109	53.4	60.1	70.9	North Dakota	70,054	4.5	9.2	9.2
Tennessee	41,961	48.5	56.1	69.5	South Dakota	76,536	5.2	8.3	8.4
Alabama	39,899	46.1	57.4	67.1	Utah	82,346	3.4	5.5	6.7
Georgia	30,594	44.0	55.2	62.1	Idaho	82,808	1.9	5.2	6.3
Arkansas	54,715	37.4	47.6	57.3	New Mexico	121,511	1.6	2.9	4.4
Louisiana	51,078	35.7	45.8	55.5	Arizona	113,580	1.1	2.9	4.4
New Hampshire	69,270	45.2	49.5	54.6	Montana	146,316	1.7	3.8	3.8
Maine	9,024	45.6	49.1	54.5	Wyoming	97,506	.9	2.0	2.6
Delaware	58,518	37.7	49.3	53.4	Nevada	109,802	.4	.7	1.0
Alaska	45,177	30.4	39.6	52.3					

*Includes Indian Territory.

Population for Urban Groups and for Rural Territory, 1910 to 1940

Source: U. S. Bureau of the Census.

The urban area is made up for the most part of cities and other incorporated places having 2,500 inhabitants or more. In addition, it includes unincorporated political subdivisions with a population of 10,000 or more and a population density of 1,000 or more per square mile, and in the states of Massachusetts, Rhode Island, and New Hampshire those towns (townships) which contain a village of 2,500 or more, comprising either by itself or when combined with other villages within the same town, more than fifty per cent of the total population of the town.

The remainder of the population is classified as rural and is subdivided into the rural-farm population, which comprises all rural residents living on farms, without regard to occupation, and the rural nonfarm population, which comprises the remaining rural population.

Type of place by population	1910			1920		
	Number of places	Population	Percent	Number of places	Population	Percent
Urban territory.....	2,262	41,998,932	45.7	2,722	54,157,973	51.2
1,000,000 or more.....	3	8,501,174	9.2	3	10,145,532	9.6
500,000—1,000,000.....	5	3,010,667	3.3	9	6,223,769	5.9
250,000—500,000.....	11	3,949,839	4.3	13	4,540,838	4.3
100,000—250,000.....	31	4,840,458	5.3	43	6,519,187	6.2
50,000—100,000.....	59	4,178,915	4.5	76	5,265,408	5.0
25,000—50,000.....	119	4,023,397	4.4	143	5,075,041	4.8
10,000—25,000.....	369	5,548,868	6.0	465	7,034,668	6.7
5,000—10,000.....	605	4,217,420	4.6	715	4,967,625	4.7
2,500—5,000.....	1,060	3,728,194	4.1	1,255	4,385,905	4.1
Rural territory.....		49,973,334	54.3		51,552,647	48.8
1,000—2,500 (Incorporated).....	2,720	4,238,498	4.6	3,032	4,714,490	4.5
Under 1,000 (Incorporated).....	9,112	3,930,651	4.3	9,825	4,254,751	4.0
Unincorporated territory.....		41,804,185	45.5		42,583,406	40.3
Total United States.....		91,972,266	100.0		105,710,620	100.0

Type of place by population	1930			1940		
	Number of places	Population	Percent	Number of places	Population	Percent
Urban territory.....	3,165	68,954,823	56.2	3,464	74,423,702	56.5
1,000,000 or more.....	5	15,064,555	12.3	5	15,910,866	12.1
500,000—1,000,000.....	8	5,763,987	4.7	9	6,456,959	4.9
250,000—500,000.....	24	7,956,228	6.5	23	7,827,514	5.9
100,000—250,000.....	56	7,540,966	6.1	55	7,792,650	5.9
50,000—100,000.....	98	6,491,448	5.3	107	7,343,917	5.6
25,000—50,000.....	185	6,425,693	5.2	213	7,417,093	5.6
10,000—25,000.....	605	9,097,200	7.4	665	9,966,898	7.6
5,000—10,000.....	851	5,897,156	4.8	965	6,681,894	5.1
2,500—5,000.....	1,332	4,717,590	3.8	1,422	5,025,911	3.8
Rural territory.....	.....	53,820,223	43.8	.....	57,245,573	43.5
1,000—2,500 (Incorporated).....	3,087	4,820,707	3.9	3,205	5,026,834	3.8
Under 1,000 (Incorporated).....	10,346	4,362,746	3.6	10,083	4,315,843	3.3
Unincorporated territory.....	.....	44,636,770	36.4	.....	47,902,806	36.4
Total United States.....	.....	122,775,046	100.0	.....	131,669,275	100.0

Population of 10 Major U. S. Cities, 1860 to 1940

Rank	City	1860	1900	1910	1920	1930	1940
1	New York City.....	1,174,779	3,437,202	4,766,883	5,620,048	6,930,446	7,454,995
2	Chicago, Ill.....	109,260	1,698,575	2,185,283	2,701,705	3,376,438	3,396,800
3	Philadelphia, Pa.....	565,529	1,293,697	1,549,008	1,823,779	1,950,961	1,931,334
4	Detroit, Mich.....	45,619	285,704	465,766	993,678	1,568,662	1,623,452
5	Los Angeles, Calif.....	4,385	102,479	319,198	576,673	1,238,048	1,504,271
6	Cleveland, Ohio.....	43,417	381,768	560,663	796,841	900,429	878,330
7	Baltimore, Md.....	212,418	508,957	558,485	733,826	804,874	859,100
8	St. Louis, Mo.....	160,773	575,238	687,029	772,897	821,960	816,040
9	Boston, Mass.....	177,840	560,892	670,585	748,060	781,188	770,810
10	Pittsburgh, Pa.....	77,923	451,512	533,905	588,343	669,817	671,650

Number of Villages, Towns, and Cities in the United States, 1946

Source: Buckley-Dement Advertising Corporation.

State	Population								
	Under 1,000	1,000 to 2,000	2,000 to 3,000	3,000 to 5,000	5,000 to 10,000	10,000 to 25,000	25,000 to 50,000	50,000 to 100,000	Over 100,000
Alabama	1,308	64	49	35	21	8	3	2	1
Alaska	300	14	11	8	11	...	2	...	...
Arizona	1,487	46	28	31	16	7	1	1	...
Arkansas	981	126	112	71	69	41	13	7	6
California	719	30	25	10	12	6	1	1	1
Connecticut	231	49	25	22	14	13	10	2	3
Delaware	127	11	8	5	...	...	...	...	1
District of Columbia	...	...	...	...	...	...	...	...	1
Florida	793	51	36	36	20	12	4	...	3
Georgia	1,157	62	60	41	24	16	1	4	1
Hawaii	352	21	8	17	4	6	...	...	...
Idaho	1,733	149	101	83	68	40	14	7	2
Illinois	1,492	73	56	26	37	18	9	5	4
Indiana	1,359	82	55	40	28	11	6	4	1
Iowa	1,142	47	39	31	15	17	1	1	2
Kansas	3,122	78	50	26	22	7	5	1	1
Kentucky	1,065	54	36	29	22	6	3	1	1
Louisiana	794	39	20	20	14	8	2	1	...
Maine	989	46	26	14	14	11	3	...	1
Massachusetts	368	78	29	15	6	45	15	10	8
Michigan	1,559	86	72	45	42	28	7	8	3
Minnesota	1,430	76	54	30	32	12	1	...	3
Mississippi	1,196	41	26	23	12	11	1	1	...
Missouri	2,416	67	68	41	29	21	2	2	2
Montana	662	14	15	11	7	4	2	...	...
Nebraska	757	46	34	19	8	8	...	1	1
Nevada	131	6	5	4	3	1	...	...	...
New Hampshire	137	25	13	2	7	7	2	1	...
New Jersey	666	79	76	60	69	44	17	7	6
New Mexico	504	20	8	8	10	4	1	...	...
New York	2,243	151	120	97	30	59	10	6	7
North Carolina	1,165	76	69	34	24	17	5	4	1
North Dakota	708	30	12	2	6	3	1	...	...
Ohio	2,232	126	87	64	61	39	15	4	8
Oklahoma	847	51	43	30	24	17	2	...	2
Oregon	462	26	21	17	11	5	2	...	1
Pennsylvania	3,898	300	200	154	137	80	13	11	5
Rhode Island	99	16	9	4	4	7	6	1	1
South Carolina	604	56	40	36	17	7	2	2	...
South Dakota	585	31	11	10	4	5	1	...	...
Tennessee	1,787	59	28	33	22	7	1	...	4
Texas	2,836	140	127	86	71	30	7	5	4
Utah	261	31	18	15	7	2	1	...	1
Vermont	373	13	13	3	7	3	1	...	...
Virginia	1,820	39	35	30	15	8	5	3	2
Washington	641	47	29	20	9	10	3	...	3
West Virginia	1,981	114	57	21	17	7	2	3	...
Wisconsin	1,349	65	44	37	18	18	13	2	1
Wyoming	227	6	12	6	1	5	...	...	...
Total	53,095	2,963	2,120	1,502	1,112	745	215	111	92

Handfasting," formerly practiced in Scotland, was a temporary marriage solemnized by a verbal pledge of the couple holding hands. The pair were then permitted to live together for a year and a day after which they could either marry permanently or become single again. If a child was born to the couple, it was reported by the party who objected to ending the marriage a permanent arrangement.

The notorious Gretna Green marriages were performed by the village blacksmith, as a rule, although the tollkeeper, ferryman or any other person could officiate. Runaway couples needed only to declare their wish to marry in the presence of witnesses. The practice virtually ended in 1856 when the law required one of the contracting parties to reside in Scotland three weeks prior to the wedding.—*Ency. Brit.*

Population by Color and Parentage, 1940

State	Native white	Percent	Foreign-born white	Percent	Negroes	Percent	Others*	Percent
Alabama	1,837,140	64.8	11,957	.4	983,290	34.7	526	.01
Arizona	389,955	78.1	36,837	7.3	14,993	3.0	57,157	11.4
Arkansas	1,458,392	74.8	7,692	.3	482,578	24.7	713	.03
California	5,725,870	83.3	870,893	12.6	124,306	1.8	151,948	2.2
Colorado	1,036,031	92.2	70,471	6.2	12,176	1.0	4,310	.3
Connecticut	1,347,466	78.8	327,941	19.1	32,992	1.9	657	.0
Delaware	215,695	80.9	14,833	5.5	35,876	13.4	75	.02
D. C.	440,312	66.4	34,014	5.1	187,266	28.2	914	.1
Florida	1,312,125	69.1	69,861	3.6	514,198	27.1	1,058	.05
Georgia	2,026,362	64.8	11,916	.3	1,084,927	34.7	463	.01
Idaho	495,176	94.3	24,116	4.5	595	.1	4,936	.9
Illinois	6,534,829	82.7	969,373	12.2	446	4.9	3,542	.04
Indiana	3,194,692	93.2	110,631	3.2	121,916	3.5	460	.01
Iowa	2,402,446	94.6	117,245	4.6	16,694	.6	843	.03
Kansas	1,683,084	93.4	51,412	2.8	65,138	3.6	1,317	.07
Kentucky	2,615,794	91.9	15,631	.5	214,031	7.5	153	.003
Louisiana	1,484,467	62.8	27,272	1.1	849,303	35.9	2,207	.09
Maine	760,902	89.8	83,641	9.8	1,304	.1	1,348	.1
Maryland	1,436,766	78.9	81,715	4.4	301,931	16.5	546	.02
Massachusetts	3,408,744	78.9	848,852	19.6	55,391	1.2	3,340	.07
Michigan	4,356,613	82.8	683,030	12.9	208,345	3.9	7,345	.1
Minnesota	2,474,078	88.6	294,904	10.5	9,928	.3	13,130	.4
Mississippi	1,100,339	50.3	5,988	.2	1,074,578	49.2	2,878	.1
Missouri	3,425,062	90.5	114,125	3.0	244,386	6.4	738	.01
Montana	484,826	86.7	55,642	9.9	1,120	.2	17,607	3.1
Nebraska	1,215,771	92.3	81,853	6.2	14,171	1.0	3,983	.3
Nevada	93,431	84.7	10,599	9.6	664	.6	5,503	4.9
New Hampshire	422,693	85.9	68,296	13.8	414	.08	117	.02
New Jersey	3,235,277	77.7	695,810	16.7	226,973	5.4	1,709	.04
New Mexico	477,065	89.7	15,247	2.8	4,672	.8	34,802	6.5
New York	10,026,016	74.4	2,853,530	21.1	571,221	4.2	24,920	.1
North Carolina	2,558,589	71.6	9,046	.2	981,298	27.4	22,650	.6
North Dakota	557,192	86.8	74,272	11.5	201	.03	10,253	1.5
Ohio	6,047,265	87.5	519,266	7.5	339,461	4.9	1,422	.02
Oklahoma	2,083,869	89.1	20,359	.8	168,849	7.2	63,294	2.7
Oregon	988,092	90.7	87,639	8.0	2,565	.2	10,751	.9
Pennsylvania	8,453,729	85.3	973,260	9.8	470,172	4.7	2,142	.02
Rhode Island	564,021	79.0	137,784	19.3	11,024	1.5	459	.06
South Carolina	1,079,393	56.8	4,915	.2	814,164	42.8	1,295	.06
South Dakota	575,023	89.4	44,052	6.8	474	.07	23,402	3.6
Tennessee	2,395,586	82.1	11,320	.3	508,736	17.4	186	.00
Texas	5,253,157	81.8	234,388	3.6	924,391	14.4	2,592	.04
Utah	510,622	92.8	32,298	5.8	1,235	.2	6,049	1.0
Vermont	327,079	91.0	31,727	8.8	384	.1	40	.01
Virginia	1,992,596	74.4	22,987	.8	661,449	24.7	480	.01
Washington	1,494,984	86.2	203,163	11.7	7,424	.4	28,304	1.6
West Virginia	1,742,320	91.6	41,782	2.1	117,754	6.1	85	.00
Wisconsin	2,823,978	90.0	288,774	9.2	12,158	.3	12,578	.4
Wyoming	229,818	91.6	16,779	6.6	956	.3	3,094	1.2
Totals	106,795,732	81.1	11,419,138	8.6	12,865,518	9.7	538,420	.4

*American Indians—total 333,969; Chinese—77,504; Japanese—126,947.

Single and Plural Births, United States, 1944

(Only those cases in which at least one child was born alive are included)

Types of birth	Total cases	Age of mother, in years											Not stated
		10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55 & over		
Single.....	2,738,438	3,555	297,836	853,439	753,174	498,407	255,115	68,284	4,699	134	53	3,741	
Twins.....	28,591	6	1,704	6,875	8,027	6,800	4,195	913	40	.....	.....	31
Triplets.....	286	.....	9	42	72	90	59	11	.....	.....	.....	.....
Quadruplets.....	8	.....	.....	2	2	4	.....	.....	.....	.....	.....	.....
Quintuplets.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total cases.....	2,767,323	3,561	299,549	860,358	761,275	505,301	259,369	69,208	4,739	134	53	3,771	

Estimated Population of Continental United States by Color, Sex, and Age: July 1, 1944 to July 1, 1945

Source: U. S. Bureau of the Census.

	White				Nonwhite			
	Male		Female		Male		Female	
	1944	1945	1944	1945	1944	1945	1944	1945
5.....	5,667,635	5,894,842	5,428,569	5,638,618	773,027	806,875	774,606	806,575
9.....	4,931,920	5,008,104	4,738,917	4,806,451	751,341	769,079	745,288	763,496
4.....	4,778,499	4,725,160	4,622,440	4,569,778	669,495	674,088	676,748	680,288
9.....	5,313,027	5,209,611	5,163,841	5,065,314	687,697	685,759	695,519	690,822
4.....	5,429,639	5,382,417	5,430,980	5,431,470	643,005	652,865	688,280	690,977
9.....	5,012,434	5,021,796	5,175,467	5,226,399	560,417	567,795	649,189	653,649
4.....	4,812,347	4,841,625	4,942,868	5,003,970	536,000	543,731	604,153	617,332
9.....	4,476,135	4,535,910	4,542,907	4,617,723	474,707	478,560	515,386	519,112
4.....	4,140,824	4,196,258	4,165,209	4,229,425	460,390	464,919	502,489	510,046
9.....	3,859,275	3,881,899	3,832,977	3,875,106	384,454	392,801	387,917	401,442
4.....	3,627,543	3,650,799	3,531,044	3,583,083	321,142	326,425	314,742	323,698
9.....	3,128,053	3,196,325	3,006,073	3,091,849	253,799	258,648	233,773	241,941
4.....	2,415,113	2,480,505	2,384,234	2,454,317	192,844	196,561	170,935	174,752
9.....	1,832,191	1,864,132	1,895,726	1,933,196	139,462	142,188	129,005	131,359
4.....	1,303,368	1,328,787	1,409,573	1,449,408	92,634	94,618	87,437	89,470
over.....	1,280,339	1,321,503	1,479,652	1,537,357	96,021	100,396	112,728	118,027
over.....	47,632,721	47,902,860	47,930,007	48,456,657	4,977,823	5,039,869	5,227,855	5,298,598
over.....	40,216,479	40,628,487	40,711,243	41,364,238	4,020,445	4,085,161	4,256,491	4,332,784
.....	62,008,342	62,539,673	61,750,477	62,513,464	7,036,435	7,155,308	7,288,195	7,412,986

Number of Live Births by Age and Color of Parents, United States, 1944

Source: U. S. Bureau of the Census.

Age of mother, in years	Age of father, in years										Total births	
	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55 & over		Not stated
White												
.....	6	344	290	69	28	11	11	8	7	7	430	1,211
10.....	34,838	125,799	38,098	9,153	3,049	1,183	469	173	156	13,829	226,757	226,757
.....	7,915	283,602	320,290	95,101	25,059	8,471	2,725	1,164	768	14,872	759,967	759,967
.....	394	29,436	289,146	257,912	80,416	22,982	7,290	2,599	1,687	5,451	697,313	697,313
.....	45	2,678	34,756	189,987	156,815	54,081	15,200	5,461	3,104	2,608	464,735	464,735
.....	.....	367	3,422	22,176	95,630	74,254	25,457	8,361	4,562	1,443	235,672	235,672
.....	.....	54	243	1,301	6,621	24,600	18,166	7,122	3,401	504	62,012	62,012
.....	.....	6	17	31	114	495	1,758	1,071	525	33	4,050	4,050
.....	.....	1	6	17	12	12	10	31	20	3	112	112
.....	.....	.....	2	1	8	11	8	1	10	.....	41	41
.....	.....	29	350	455	440	335	156	70	45	19	931	2,830
.....	16	43,565	442,583	686,504	576,147	368,070	186,256	71,161	26,035	14,259	40,104	2,454,700
Nonwhite												
.....	9	534	256	49	18	11	11	3	2	2	1,459	2,354
.....	8	13,221	29,186	7,163	2,015	913	394	171	58	53	21,191	74,373
.....	2	1,422	36,829	36,359	12,321	5,013	2,037	787	288	239	11,682	106,979
.....	.....	90	2,910	23,633	23,329	9,899	4,161	1,730	655	502	4,793	71,702
.....	.....	10	362	2,628	15,285	14,448	6,778	2,711	1,199	849	2,864	47,134
.....	.....	.....	55	394	1,860	9,027	8,195	3,582	1,561	1,272	1,824	27,770
.....	.....	.....	15	36	143	532	2,714	2,235	1,102	792	492	8,061
.....	.....	.....	2	6	7	20	63	224	197	166	43	728
.....	.....	.....	.....	.....	3	3	.....	2	2	8	4	22
.....	.....	.....	1	.....	1	1	3	.....	.....	4	2	12
.....	.....	28	124	108	98	86	45	24	15	10	427	965
.....	19	15,305	69,740	70,376	55,080	39,953	24,401	11,469	5,079	3,897	44,781	340,100

Selected Vital Statistics, 1900 to 1941

Source: U. S. Bureau of the Census.

Race and period	At birth		Age 20		Age 45		Age 65	
	Male	Female	Male	Female	Male	Female	Male	Female
Annual rate of mortality per 1,000 living								
White								
1900-1902.....	133.45	110.61	5.94	5.54	12.63	10.63	41.66	36.44
1909-1911.....	123.26	102.26	4.89	4.20	12.64	9.91	43.79	37.88
1919-1921.....	80.25	63.92	4.27	4.33	9.26	8.14	34.99	31.68
1929-1931.....	62.32	49.63	3.18	2.77	9.29	7.02	38.65	31.25
1939-1941.....	48.12	37.89	2.12	1.45	7.66	5.23	36.85	26.43
Negro								
1929-1931.....	87.32	72.04	8.58	8.82	22.40	20.18	50.72	49.35
1939-1941.....	82.28	65.84	5.44	5.32	18.59	16.02	46.85	40.90

Average future lifetime in years								
White								
1900-1902.....	48.23	51.08	42.19	43.77	24.21	25.51	11.51	12.23
1909-1911.....	50.23	53.62	42.71	44.88	23.86	25.45	11.25	11.97
1919-1921.....	56.34	58.53	45.60	46.46	26.00	26.98	12.21	12.75
1929-1931.....	59.12	62.67	46.02	48.52	25.28	27.39	11.77	12.81
1939-1941.....	62.81	67.29	47.76	51.38	25.87	28.90	12.07	13.56
Negro								
1929-1931.....	47.55	49.51	35.95	37.22	20.59	21.39	10.87	12.24
1939-1941.....	52.26	55.56	39.52	42.04	21.88	23.89	12.21	13.93

10 Leading Causes of Death in the U. S., 1944

(Exclusive of stillbirths and deaths in armed forces overseas. Rates per 100,000 est. pop.)

Cause of death	Number	Rate	Cause of death	Number	Rate
All causes.....	1,411,338	1064.7	Pneumonia (all forms) and influenza.	81,804	61.7
Diseases of the heart.....	418,062	315.4	Accidents, excluding motor-vehicle	70,955	53.5
Cancer and other malignant tumors.....	171,171	129.1	Tuberculosis (all forms).....	54,731	41.3
Intracranial lesions of vascular origin.....	124,250	93.7	Diabetes mellitus.....	34,948	26.4
Nephritis.....	91,687	69.2	Premature birth.....	33,120	25.0
			Motor-vehicle accidents.....	24,282	18.3

Births and Death Rates in Countries of the World

(per 1,000 population)

Source: Statistical Yearbook of the League of Nations.

Country	1939		1940		1941		1942		1943	
	Births	Deaths	Births	Deaths	Births	Deaths	Births	Deaths	Births	Deaths
Australia	17.7	9.9	18.0	9.7	18.9	10.0	19.1	10.5	20.7	10.8
Belgium	15.3	13.8	13.4	16.1	12.1	14.6	12.9	14.6	14.8	13.8
British India	33.0	20.1	....	21.1	....	....	....	....	....	....
Canada	20.3	9.6	21.4	9.7	20.3	10.0	23.3	9.7	24.0	10.1
Chile	33.4	23.3	33.4	21.6	32.6	19.8	....	....	33.1	19.8
Denmark	17.9	10.1	18.3	10.4	18.5	10.3	20.5	9.7	21.4	9.9
England and Wales	14.6	12.1	14.6	14.3	14.2	12.9	15.8	11.6	16.3	12.1
France	14.6	15.3	13.3	18.2	13.0	17.4	....	....	15.9	16.1
Germany*	20.5	12.6	20.4	13.0	18.8	12.3	15.2	12.1	16.2	12.1
Ireland	19.1	14.2	19.1	14.2	19.0	14.6	22.3	14.0	21.8	14.0
Italy	23.5	13.4	23.4	13.6	20.8	13.8	20.2	14.1	20.5	14.1
Japan	26.3	17.6	28.9	16.1	....	....	....	....	....	....
Netherlands	20.6	8.6	20.8	9.9	20.3	10.0	21.0	9.5	23.0	10.1
North Ireland	19.5	13.5	19.6	14.6	20.8	15.2	22.8	13.3	24.2	13.3
Norway	15.9	10.2	16.3	10.7	....	....	....	....	....	....
Scotland	17.4	12.9	17.1	14.9	17.9	14.5	18.1	13.0	18.4	13.1
Spain	16.2	18.1	24.3	16.5	19.5	18.6	....	....	22.8	13.1
Sweden	15.3	11.5	15.0	11.4	15.6	11.2	17.7	9.9	19.3	10.1
United States	17.3	10.6	17.9	10.8	18.9	10.5	21.0	10.3	21.5	10.1

*German boundaries for 1939 to 1943 included Saar territory, Austria, Sudetenland, Danzig and Memel.

Estimated Population of the United States, April 1, 1940, to January 1, 1946

Source: U. S. Bureau of the Census.

Date	Estimated population*	Increase since April 1, 1940		Yearly net increase			Excess of births over deaths	Net civilian immigration
		Number	Percent	Number	Births†	Deaths†		
1, 1940 (census)	131,669,275							
1, 1940	131,970,224	300,949	0.23	300,949	623,065	353,212	269,853	31,096
1, 1941	132,637,933	968,658	0.74	667,709	1,311,428	692,971	618,457	49,252
1, 1941	133,202,873	1,533,598	1.16	564,940	1,316,685	761,117	555,568	9,372
1, 1942	133,953,225	2,283,950	1.73	750,352	1,400,533	681,971	718,562	31,790
1, 1942	134,664,924	2,995,649	2.28	711,699	1,407,467	733,223	674,244	37,455
1, 1943	135,645,969	3,976,694	3.02	981,045	1,630,967	701,054	929,913	51,132
1, 1943	136,497,049	4,827,774	3.67	851,080	1,578,210	786,014	792,196	58,884
1, 1944	137,368,379	5,699,104	4.33	871,330	1,580,383	761,926	818,457	52,873
1, 1944	138,083,449	6,414,174	4.87	715,070	1,436,179	794,451	641,728	73,342
1, 1945	138,922,634	7,253,359	5.51	839,185	1,533,007	786,027	746,980	92,205
1, 1945	139,621,431	7,952,156	6.04	698,797	1,437,277	845,188	592,089	106,708
1, 1946	140,386,509	8,717,234	6.62	765,078	1,469,849	750,736	719,113	45,965

*Includes Armed Forces overseas.

†Estimated total, including an adjustment for underregistration.

Death Rates per 1,000 Population, 1900 to 1943

Age, in years	1900	1920	1930	1940	1941	1942	1943
all ages*	17.9	13.4	12.3	12.0	11.8	11.7	12.6
1	179.1	103.6	77.0	61.9	58.5	53.7	48.1
	20.5	10.3	6.0	3.1	3.0	2.6	2.8
	3.8	2.8	1.9	1.2	1.1	1.1	1.4
	5.9	4.8	3.5	2.3	2.3	2.3	2.2
	8.2	6.4	4.9	3.4	3.3	3.2	3.3
	10.7	8.2	7.5	5.9	5.7	5.7	5.6
	15.7	12.6	13.6	12.5	12.2	12.2	12.3
	28.7	24.6	26.6	26.2	25.4	25.1	25.6
	59.3	54.5	55.8	54.2	53.3	52.3	5.42
	128.3	122.1	119.1	121.5	131.0	125.8	134.6
over	268.8	253.0	236.7	243.7			
ages, all ages*	16.5	12.6	10.4	9.5	9.2	9.0	9.4
1	145.4	80.7	60.7	47.7	45.8	42.0	37.5
	19.1	9.5	5.2	2.7	2.6	2.3	2.3
	3.9	2.5	1.5	.9	.8	.7	.8
	5.8	5.0	3.2	1.8	1.7	1.6	1.5
	8.2	7.1	4.4	2.7	2.6	2.4	2.4
	9.8	8.0	6.1	4.5	4.3	4.1	4.1
	14.2	11.7	10.6	8.6	8.3	8.0	8.1
	25.8	22.4	21.2	18.1	17.2	16.7	17.2
	53.6	50.5	46.8	41.9	40.1	39.2	40.8
	118.8	115.9	106.6	104.5	114.7	111.0	119.2
over	255.2	244.7	221.4	218.1			
and female, all ages*	17.2	13.0	11.3	10.8	10.5	10.4	10.9
1	162.4	92.3	69.0	54.9	52.3	48.0	43.0
	19.8	9.9	5.6	2.9	2.8	2.4	2.6
	3.9	2.6	1.7	1.0	1.0	.9	1.0
	5.9	4.9	3.3	2.0	2.0	1.9	2.0
	8.2	6.8	4.7	3.1	2.9	2.8	2.8
	10.2	8.1	6.8	5.2	5.0	4.9	4.9
	15.0	12.2	12.2	10.6	10.3	10.1	10.3
	27.2	23.6	24.0	22.3	21.4	21.0	21.5
	56.4	52.5	51.4	48.0	46.6	45.6	47.4
	123.3	118.9	112.7	112.6	122.3	117.9	126.4
over	260.9	248.3	228.0	228.9			

*Includes ages not reported.

Births and Deaths in the United States, 1915 to 1945

Source: U. S. Bureau of the Census.

Year	Births			Deaths			Excess of births over deaths
	Males	Females	Total	Males	Females	Total	
1915.....	398,615	377,689	776,304	234,871	201,722	436,593	339,711
1918.....	701,164	662,485	1,363,649	534,720	461,907	996,627	367,022
1919.....	705,593	667,845	1,373,438	422,252	375,852	798,104	575,334
1920.....	775,322	733,552	1,508,874	438,201	397,933	836,134	672,740
1921.....	881,591	832,670	1,714,261	434,019	391,492	825,511	888,750
1922.....	911,831	863,080	1,774,911	497,967	440,578	938,545	836,366
1923.....	921,020	871,626	1,792,646	528,429	463,808	992,237	800,409
1924.....	992,431	938,183	1,930,614	542,637	464,357	1,006,994	923,620
1925.....	966,973	911,907	1,878,880	555,267	475,251	1,030,518	848,362
1926.....	953,638	902,430	1,856,068	589,653	503,858	1,093,511	762,557
1927.....	1,099,287	1,038,549	2,137,836	638,080	538,725	1,176,805	961,031
1928.....	1,147,625	1,085,524	2,233,149	738,891	623,096	1,361,987	871,162
1929.....	1,114,814	1,055,106	2,169,920	745,491	624,266	1,369,757	800,163
1930.....	1,131,976	1,071,982	2,203,958	723,315	598,052	1,321,367	882,591
1931.....	1,084,404	1,028,356	2,112,760	714,277	587,128	1,301,405	811,355
1932.....	1,063,885	1,010,157	2,074,042	704,506	588,763	1,293,269	780,773
1933.....	1,068,871	1,012,361	2,081,232	737,312	604,794	1,342,106	739,126
1934.....	1,112,703	1,054,933	2,167,636	772,595	624,308	1,396,903	770,733
1935.....	1,105,489	1,049,616	2,155,105	771,320	621,432	1,392,752	762,353
1936.....	1,099,465	1,045,325	2,144,790	821,439	657,789	1,479,228	665,562
1937.....	1,130,641	1,072,696	2,203,337	808,834	641,593	1,450,427	752,910
1938.....	1,172,541	1,114,421	2,286,962	764,902	616,489	1,381,391	905,571
1939.....	1,162,600	1,102,988	2,265,588	768,877	619,020	1,387,897	877,691
1940.....	1,211,684	1,148,715	2,360,399	791,003	626,266	1,417,269	943,130
1941.....	1,289,734	1,223,693	2,513,427	785,033	612,609	1,397,642	1,115,785
1942.....	1,444,365	1,364,631	2,808,996	780,454	604,733	1,385,187	1,423,809
1943.....	.....	.....	2,934,860	.....	.....	1,459,544	1,475,316
1944.....	.....	.....	2,794,800	.....	.....	1,411,338	1,383,462
1945.....	.....	.....	2,970,284	.....	.....	1,631,215	1,339,069

In 1870, sixty percent of all non-agricultural working women in the United States were domestic servants. Less than one percent held clerical positions, 6.4 percent were in the principal professions and 17.6 percent were factory workers.—*Encyc. Brit.*

Fishing is the oldest industry in the world. About 190,000 people in the United States work for fisheries and fishery industries. More than 90 percent of the sea fish landed in American ports is consumed within 200 miles of the sea.—*Encyc. Brit.*

Deaths in Civil Aviation Accidents, 1928 to 1945

Source: U. S. Civil Aeronautics Administration.

Year	Air carriers, domestic operations				Private flying		Total deaths
	All deaths		Passenger deaths		Deaths	Rate*	
	Number	Rate*	Number	Rate*			
1928.....	23	...	13	...	362	....	385
1933.....	28	11.4	8	4.6	310	217.6	338
1934.....	29	10.7	17	9.0	325	214.9	354
1935.....	29	6.4	15	4.8	262	154.6	291
1936.....	61	10.3	44	10.1	272	145.7	333
1937.....	52	7.8	40	8.4	283	137.1	335
1938.....	35	4.6	25	4.5	275	106.3	310
1939.....	12	1.2	9	1.2	314	88.3	326
1940.....	45	3.1	35	3.1	330	62.5	375
1941.....	44	2.4	35	2.3	325	47.0	369
1942.....	71	3.9	55	3.7	218	†	289
1943.....	30	1.6	23	1.4	255	†	285
1944.....	58	2.2	48	2.1	135	1st 6 mo.	315
1945.....	88	2.1	76	2.1	202	1st 6 mo.	290†

*The passenger death rates are the numbers killed per 100,000,000 passenger-miles. Other rates are the numbers of deaths per 100,000,000 occupant-miles.

†Data on occupant-miles for private flying not available for years 1942 to 1945.

‡Based on deaths in the first 6 months of 1945 compared to deaths in the same months of 1935 and 1944.

Accidental Deaths by Age, 1913 to 1945

Source: National Safety Council.

	0-4 years	5-14 years	15-24 years	25-44 years	45-64 years	65 years and over*	All ages
.....	9,800	7,450	11,950	24,350	16,450	12,500	82,500
.....	10,400	10,000	10,550	22,050	17,550	14,550	85,100
.....	9,350	9,250	9,900	18,550	14,950	14,300	76,300
.....	9,450	9,550	11,100	21,250	17,150	15,900	84,400
.....	8,850	9,750	13,000	23,200	20,700	19,500	95,000
.....	6,948	8,195	12,225	21,005	20,819	21,740	90,932
.....	6,646	6,593	12,129	20,464	21,689	26,284	93,805
.....	7,052	6,702	14,436	22,983	22,509	27,921	101,513
.....	7,220	6,340	13,732	21,141	20,764	26,692	95,889
.....	8,039	6,636	15,278	20,212	20,109	28,764	99,038
.....	7,912	6,704	14,750	19,115	19,097	27,659	95,237
.....	7,750	6,700	12,700	19,150	20,200	29,500	96,000

*includes "age unknown"; in 1944 these deaths numbered only 434.

Principal Types of Accidental Deaths, 1913 to 1945

	Motor vehicle	Falls	All burns*	Drown- ing	Rail- road	Fire- arms	Poison gases	Poisons (except gas)	All types
.....	4,200	18,700	9,350	10,000	12,500	2,400	3,550	3,200	82,500
.....	10,700	16,700	10,700	7,350	10,500	2,700	4,400	2,650	85,100
.....	18,400	16,800	9,550	7,000	8,100	2,950	2,800	2,950	84,400
.....	28,000	19,600	9,000	8,750	7,150	3,000	2,800	2,850	95,000
.....	31,363	21,746	7,341	7,465	5,410	3,026	1,668	2,334	90,932
.....	36,369	24,520	7,874	7,108	5,406	2,854	1,665	2,120	99,773
.....	32,582	25,454	7,145	7,347	4,868	2,696	1,459	2,196	93,805
.....	39,969	25,470	7,820	6,930	5,390	2,414	1,540	1,830	101,513
.....	28,309	25,460	9,010	7,120	5,454	2,741	1,760	1,800	95,889
.....	23,823	28,000	10,450	7,710	5,231	2,318	2,110	1,890	99,038
.....	24,282	26,170	10,040	7,030	5,119	2,412	1,970	2,090	95,237
.....	28,600	27,800	9,950	7,150	5,050	2,500	2,200	2,250	96,000

*includes burns by chemicals, fire, steam, or any other hot substance; also deaths directly resulting from aggravations, regardless of nature of injury.

Motor Vehicle Deaths by Type of Accident, 1913 to 1945

	Deaths from collisions with—							Deaths from non- collision accidents*	Total deaths†
	Pedes- trians	Other motor vehicles	Rail- road trains	Street cars	Bi- cycles	Animal- drawn vehicle or animal	Fixed objects*		
.....	.....	.....	.....	.....	.....	.....	.....	.....	4,200
.....	.....	.....	.....	.....	.....	.....	.....	.....	18,400
.....	12,840	6,470	1,437	318	400	310	900	8,680	31,363
.....	15,500	10,320	1,810	264	700	200	1,160	9,690	39,643
.....	12,400	8,700	1,330	150	710	200	1,000	7,900	32,386
.....	13,550	12,500	1,840	118	910	250	1,350	9,450	39,969
.....	10,650	7,300	1,754	124	650	240	850	6,740	28,309
.....	9,900	5,300	1,448	171	450	160	700	5,690	23,823
.....	9,900	5,700	1,663	175	400	140	700	5,600	24,282
.....	11,200	7,300	1,740	180	500	130	800	6,750	28,600

*totals of deaths in fixed object collisions are considerably smaller than those shown in editions of Accident prior to 1940, and death totals in non-collision accidents are larger. This is due to transferring to non-collision, those deaths in accidents where the car left the highway and then struck a fixed object. The remaining deaths classified as fixed objects are those which occurred when cars struck fixed objects in roadway, immediately adjacent to rural roadway. This is in accordance with accepted accident definitions.

†totals do not quite equal the sum of the various types because the estimates were generally made only to the nearest 10 deaths, and to the nearest 50 deaths for certain types.

Transportation Accident Death Rates, 1943 to 1945

Source: National Safety Council.

Kind of transportation	1945			1943-45 average death rate
	Mileage*	Deaths	Death rate per 100,000,000 miles*	
Passenger operations				
Passenger deaths:				
Passenger automobiles and taxis†	440,000,000,000	12,900	2.9	2.8
Busses.....	69,000,000,000	120	0.17	0.20
Railroad passenger trains.....	91,800,000,000	145	0.16	0.25
Scheduled air transport planes.....	3,555,000,000	76	2.1	2.0
All deaths:‡				
Passenger automobiles and taxis†	440,000,000,000	20,600	4.7	4.6
Busses.....	69,000,000,000	950	1.4	1.5
Railroad passenger trains.....	91,800,000,000	2,238	2.4	2.5
Scheduled air transport planes.....	3,555,000,000	88	2.5	2.4
Freight operations				
All deaths:‡				
Motor trucks.....	77,000,000,000	8,200	10.6	11.0
Freight trains.....	725,000,000,000	2,591	0.36	0.35

*Mileage in the section "Passenger operations" is passenger-miles; in the section "Freight operations" it is freight ton-miles.

†Drivers of passenger automobiles and pilots of private planes are considered passengers.

‡All persons—pedestrians, trespassers, etc.—killed in the operation of the vehicles are included.

Deaths and Injuries in Steam Railway Accidents, 1918 to 1945

Source: National Safety Council.

Year	Passengers on trains*	Travelers not on trains*	Employees on duty	Persons in grade crossing accidents	Other non-trespassers†	Trespassers	Total‡
All deaths§							
1918.....	521**		3,566	1,979	501	3,423	9,994
1923.....	149**		2,134	2,422	370	2,861	7,799
1928.....	104**		1,357	2,768	363	2,532	7,002
1933.....	47	13	571	1,638	179	3,025	5,434
1938.....	79	9	549	1,679	190	2,428	4,879
1941.....	41	10	826	2,089	272	2,252	5,452
1942.....	98	21	1,043	2,117	322	2,040	5,558
1943.....	271	13	1,089	1,876	326	1,788	5,302
1944.....	259	14	1,087	2,000	315	1,549	5,105
1945.....	145	13	987	2,074	220	1,616	5,055
Non-fatal injuries††							
1918.....	7,266**		155,102	4,556	4,517	2,637	173,867
1923.....	6,423**		151,766	6,160	3,994	3,096	171,037
1928.....	3,987**		69,578	6,466	2,779	2,483	85,047
1933.....	1,963	549	15,512	3,570	1,819	3,798	27,079
1938.....	2,262	736	16,093	3,856	1,786	2,299	26,273
1941.....	2,909	863	25,188	4,727	2,164	1,745	37,445
1942.....	3,388	916	35,106	4,469	2,553	1,544	47,782
1943.....	5,013	1,123	45,685	4,073	2,984	1,270	59,957
1944.....	4,678	1,063	47,221	4,056	2,974	1,089	60,866
1945.....	4,709	1,103	47,190	4,275	2,755	1,085	61,117

*Persons on or getting on or off passenger-carrying trains under conditions not constituting trespass are designated as "passengers on trains." Other persons lawfully on railway premises in connection with their journeys by railways are designated as "travelers not on trains."

†Death totals in this column exclude subsequent fatalities and injury totals include them, due to lack of information.

‡The sum of the items in the preceding columns exceeds the figure in the "Total" column because of duplication; e.g., employees killed in grade crossing accidents.

§Including those occurring more than 24 hours after injury.

**Deaths and injuries to passengers on trains and travelers not on trains are combined.

††Excluding subsequent fatalities.

Public Non-transportation Deaths, 1944

Source: National Safety Council.

Type of accident	0-4 years	5-14 years	15-24 years	25-44 years	45-64 years	65 and over	All ages
Drowning.....	460	1,300	800	700	660	280	4,200
Strokes.....	40	120	90	250	550	2,100	3,150
Arms.....	10	210	300	250	150	30	950
Fires, explosions.....	80	140	140	300	160	130	950
Heart.....	210	330	120	350	730	510	2,250
Alcohol.....	800	2,100	1,450	1,850	2,250	3,050	11,500

Motor Vehicle Deaths by States, 1944-45

Source: National Safety Council.

State	1945	1944
Alabama.....	592	498
Alaska.....	283	180
Arizona.....	273	255
California.....	3,542	2,534
Colorado.....	276	203
Connecticut.....	250	221
Delaware.....	72	74
District of Columbia.....	76	68
Florida.....	633	551
Georgia.....	676	647
Idaho.....	186	81
Illinois.....	1,587	1,355
Indiana.....	860	784
Iowa.....	366	310
Kansas.....	302	274
Kentucky.....	575	483
Louisiana.....	...	...
Maine.....	163	119
Maryland.....	433	385
Massachusetts.....	486	472
Michigan.....	...	...
Minnesota.....	447	356
Mississippi.....	322	306
Missouri.....	670	539
Montana.....	113	88
Nebraska.....	209	166
Nevada.....	71	35
New Hampshire.....	72	57
New Jersey.....	630	609
New Mexico.....	...	...
New York.....	1,724	1,584
North Carolina.....	732	658
North Dakota.....	77	74
Ohio.....	...	...
Oklahoma.....	412	308
Oregon.....	352	245
Pennsylvania.....	1,380	1,325
Rhode Island.....	86	67
South Carolina.....	450	404
South Dakota.....	86	99
Tennessee.....	547	431
Texas.....	1,517	1,373
Vermont.....	174	121
Virginia.....	62	28
Washington.....	620	552
West Virginia.....	580	402
Wisconsin.....	307	263
Wyoming.....	631	526
Unlabeled.....	72	62

Mortality from 15 Leading Causes of Death

Per 100,000 of population in U. S.

Cause	1900	1910	1920	1930	1940
Heart disease.....	151.4	185.7	188.6	238.1	314.4
Cancer.....	64.0	76.2	83.4	102.2	120.3*
Nephritis.....	88.7	94.8	88.7	91.0	81.5
Accident.....	77.3	84.5	71.6	80.5	73.6
Pneumonia.....	175.4	141.7	136.8	82.6	54.9
Tuberculosis.....	194.4	153.8	113.1	71.7	45.9
Diabetes.....	11.0	15.3	16.1	19.1	26.6
Influenza.....	26.7	14.2	70.5	19.4	15.3
Diarrhea.....	139.9	114.2	53.6	26.0	10.3
Whooping cough.....	12.2	11.6	12.5	4.8	2.2
Diphtheria.....	40.3	21.1	15.3	4.9	1.1
Typhoid.....	31.3	22.5	7.6	4.7	1.0
Measles.....	13.3	12.4	8.8	3.2	.5
Scarlet fever.....	9.6	11.4	4.6	1.9	.5
Meningitis.....	5.8	3.8	3.0	3.6	.5

*156,000 cancer deaths in 1940; 171,171 in 1944.

One Accidental Death Every 5 Minutes in 1945

Source: National Safety Council.

The nation's 1945 accident totals can be figured at the following approximate rates:

Class of accident	Deaths	Injuries	One every
All accidents	5½ minutes	3 seconds	
Motor vehicle	18½ minutes	31½ seconds	
Occupational*	33 minutes	16 seconds	
Workers off-job*	18 minutes	12½ seconds	
Home*	15½ minutes	6½ seconds	
Public non-motor vehicle*	34 minutes	17 seconds	

*Civilians only.

"Soda pop" and other carbonated beverages got their start as medicines. "Pop" was introduced in the United States by a Philadelphia doctor who had carbonated water prepared as a medicine for his patients. Later fruit juice was added as a flavor.—*Encyc. Brit.*

Grounds for Divorce

Source: U. S. Department of Labor.

State	Adultery	Cruelty	Desertion	Alcoholism	Impotence	Pelony conviction	Neglect to provide	Insanity	Pregnancy at marriage	Bigamy	Imprisonment	Fraudulent contract	Pelony before marriage	Violence	Loathsome disease	Plaintiff	Defendant	Period before parties may remarry
Alabama	yes	yes	yes	yes	yes	yes	yes	yes ¹	yes	...	...	...	...	yes	...	2 mo.	2 mo.	...
Arizona	yes	yes	yes	yes	yes	yes	yes	yes	yes	...	...	...	yes	yes	...	1 yr.	1 yr.	...
Arkansas	yes	yes	yes	yes	yes	yes ¹	...	...	...	yes	...	...	...	...	...	immediately	immediately	...
California	yes	yes	yes	yes	yes	yes	yes	yes	...	...	...	...	...	...	...	1 yr.	1 yr.	...
Colorado	yes	yes	yes	yes	yes	yes	yes	yes ¹	...	yes	...	...	...	...	...	6 mo.	6 mo.	...
Connecticut	yes	yes	yes	yes	yes	yes	yes	yes ¹	...	yes	yes	...	...	...	...	immediately	immediately	...
Delaware	yes	yes	yes	yes	yes	yes	yes	yes ¹	...	yes	yes ⁴	...	...	...	...	1 yr.	1 yr.	...
District of Columbia	yes	yes ¹¹	yes	...	...	...	...	...	...	...	...	...	...	...	...	6 mo.	6 mo.	...
Florida	yes	yes	yes	yes	yes	yes	...	...	...	...	...	...	...	...	...	immediately	immediately	...
Georgia	yes	yes ⁴	yes	yes	yes	yes	...	...	yes	...	...	...	...	...	...	fixed by court	fixed by court	...
Idaho	yes	yes	yes	yes ⁵	yes	yes	yes	yes ⁴	...	...	...	...	...	yes ⁵	...	6 mo.	6 mo.	...
Illinois	yes	yes	yes	yes	yes	yes	yes	...	...	...	...	...	...	...	...	immediately	immediately	...
Indiana	yes	yes	yes	yes	yes	yes	yes	yes ¹	...	yes	...	...	...	yes	yes	6 mo.	6 mo.	...
Iowa	yes	yes	yes	yes	yes	yes	yes	...	...	...	...	...	...	...	...	immediately	immediately	...
Kansas	yes	yes	yes	yes	yes	yes	yes	yes	yes	...	...	...	...	...	...	1 yr.	1 yr.	...
Kentucky	yes	yes	yes	yes	yes	yes	yes	yes ¹	yes	yes	...	...	...	...	...	6 mo.	6 mo.	...
Louisiana	yes	yes	...	yes	yes	yes	...	yes	...	yes	...	...	...	...	...	immediately	immediately	...
Maine	yes	yes	yes	yes	yes	yes	...	...	...	...	...	...	...	...	...	1 yr.	1 yr.	...
Maryland	yes	yes	yes	yes	yes	yes	yes	...	...	...	...	...	...	...	...	6 mo.	6 mo.	...
Massachusetts	yes	yes	yes	...	yes	yes	yes	yes	...	...	...	...	...	yes	yes	immediately	immediately	...
Michigan	yes	yes	yes	yes	yes	yes	yes	...	...	...	...	...	...	yes	...	man, 1 yr., wife, 22 mo.	man, 14 mo.; wife, 2 yr. ⁸	...
Minnesota	yes	...	yes	yes	yes	yes	yes	...	...	yes ¹	...	...	...	...	...	immediately	immediately	...
Mississippi	yes	yes	yes	yes	yes	yes	yes	...	...	yes ²	...	...	...	...	...	immediately	immediately	...
Missouri	yes	yes	yes	yes	yes	yes	yes	yes ²	yes	yes	yes	...	...	...	...	6 mo.	6 mo.	...
Montana	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	...	...	...	...	...	immediately	immediately	...
Nebraska	yes	yes	yes	yes	yes	yes	yes	...	...	...	...	...	...	...	...	immediately	immediately	...
Nevada	yes	yes	yes	yes	yes	yes	yes	yes ¹	...	yes ²	...	...	...	...	...	6 mo.	6 mo.	...
New Hampshire	yes	yes	yes	yes	yes	yes	yes ⁴	...	...	...	...	...	...	...	...	immediately	immediately	...
New Jersey	yes	yes	yes	yes	yes	yes	yes	yes ¹⁰	...	...	...	...	...	...	...	immediately	immediately	...
New Mexico	yes	yes	yes	...	...	...	...	...	...	...	...	...	...	...	...	3 mo.	3 mo.	...
New York	yes	yes	yes	yes	yes	yes	yes	yes	...	...	...	...	...	...	...	immediately	immediately	...
North Carolina	yes	...	yes	yes	yes	yes	...	yes	...	...	...	...	...	...	...	immediately	immediately	...

¹¹Legal separation for cruelty, which can be enlarged into an absolute divorce after 2 years.
¹²Man immediately; woman after 301 days.
¹³At the discretion of the court.

Source: U. S. Bureau of the Census.

*Not available.

Marriage Laws as of January 1, 1945

Source: U. S. Department of Labor.

State	Legal minimum marriage age		Common law marriages valid	Blood test	Waiting period		Residence for divorce
	Male	Female			For license	After license	
Alabama.....	17	14	Yes	(1)	None	None	1 yr.
Arizona.....	18	16	No	No	None	None	1 yr.
Arkansas.....	18	16	No	No	None	None	3 mo. ²
California.....	18	16	No	Yes	3 d.	3 d.	1 yr.
Colorado.....	18	18	Yes	Yes	None	None	1 yr.
Connecticut.....	16	16	No	Yes	5 d.	None	3 yr.
Delaware.....	18	16	No	No	None	Yes ³	2 yr. ⁴
Florida.....	18	16	Yes	No	None	None	3 mo.
Georgia.....	17	14	Yes	No	5 d.	None	1 yr.
Idaho.....	14 ⁵	12 ⁵	Yes	Yes	None	None	6 wk.
Illinois.....	18	16	Yes	Yes	None	None	1 yr.
Indiana.....	18	16	Yes	Yes	None	None	1 yr.
Iowa.....	16	14	Yes	Yes	None	None	1 yr.
Kansas.....	18	16	Yes	No	None	None	1 yr.
Kentucky.....	16	14	No	Yes	None	None	1 yr.
Louisiana.....	18	16	No	(1)	None	None	1 yr.
Maine.....	16	16	Yes	Yes	5 d.	None	1 yr.
Maryland.....	18	16	No	No	2 d.	None	1 yr.
Massachusetts.....	18	16	No	Yes	5 d.	None	5 yr.
Michigan.....	18	16	Yes	Yes	5 d.	None	1 yr.
Minnesota.....	18	16	No	No	5 d.	None	1 yr.
Mississippi.....	14 ⁵	12 ⁵	Yes	No	5 d.	None	1 yr.
Missouri.....	15	15	No	Yes	None	None	1 yr.
Montana.....	18	16	Yes	No	None	None	1 yr.
Nebraska.....	18	16	No	No	None	None	2 yr. ⁶
Nevada.....	18	16	No	No	None	None	6 wk.
New Hampshire.....	14	13	No	Yes	5 d.	None	1 yr. ⁷
New Jersey.....	14 ⁵	12 ⁵	No	Yes	2 d.	None	2 yr.
New Mexico.....	18	16	No	No	None	None	1 yr.
New York.....	16	14	No	Yes	3 d.	1 d.	(⁸)
North Carolina.....	16	16	No	Yes	None	None	6 mo.
North Dakota.....	18	15	No	Yes	None	None	1 yr.
Ohio.....	18	16	Yes	Yes	5 d.	None	1 yr.
Oklahoma.....	18	15	Yes	No	5 d.	None	1 yr.
Oregon.....	18	15	No	Yes	3 d.	None	1 yr.
Pennsylvania.....	16	16	Yes	Yes	3 d.	None	1 yr.
Rhode Island.....	18	16	Yes	Yes	None	None	2 yr.
South Carolina.....	18	14	Yes	No	None	None	No divorce
South Dakota.....	18	15	Yes	Yes	None	None	1 yr.
Tennessee.....	16	16	Yes	Yes	3 d.	None	2 yr.
Texas.....	16	14	Yes	(1)	None	None	1 yr.
Utah.....	16	14	No	Yes	None	None	1 yr.
Vermont.....	18	16	No	Yes	None	None	6 mo.
Virginia.....	18	16	No	Yes	3 d.	None	1 yr.
Washington.....	14 ⁵	12 ⁵	No	No	3 d.	None	1 yr.
West Virginia.....	18	16	No	Yes	3 d.	None	2 yr. ⁶
Wisconsin.....	18	15	No	Yes	5 d.	None	2 yr.
Wyoming.....	18	16	Yes	Yes	None	None	2 mo.

¹Law adopted applying to male only; laboratory test authorized but not required.

²Divorce suits may be filed after 2 months' residence, but an additional month must elapse before a decree may be granted.

³Residents 24 hours, nonresidents 96 hours.

⁴One year's residence for divorce based on adultery or bigamy.

⁵Common-law marriage age.

⁶One year where the cause for divorce arose within the state.

⁷Three years on grounds of desertion.

⁸Parties must have married in the state or resided there when offense was committed.

Britain taxed bachelors in 1695 to pay for the war with France. While there has been no direct legislation bearing on bachelors in Britain, they occasionally have been taxed more heavily than others.

The custom of having wedding attendants for the bridegroom began in the days of marriage by capture, when a man called on his friends to help him seize the bride.—*Encyc. Brit.*

Marital Status of the Population, 1940

(15 years old and over)

Source: U. S. Bureau of the Census.

State	Single		Married		Widowed		Divorced	
	Male	Female	Male	Female	Male	Female	Male	Female
Alabama.....	291,246	232,468	603,014	609,036	36,637	124,988	6,936	12,478
Arizona.....	59,602	34,974	108,813	107,277	7,817	18,600	4,146	4,098
Arkansas.....	199,300	137,052	438,087	437,562	32,280	81,981	8,054	10,956
California.....	918,978	570,269	1,701,632	1,679,001	114,276	360,840	86,012	109,078
Colorado.....	132,778	92,675	261,748	260,043	20,096	49,661	8,547	9,765
Connecticut.....	240,788	214,005	390,950	389,206	28,537	71,570	4,750	6,729
Delaware.....	34,979	26,865	62,504	62,332	5,141	12,120	900	1,152
D.C.....	90,495	85,052	154,108	155,834	9,636	38,468	4,037	7,276
Florida.....	206,116	145,365	452,394	453,226	33,501	103,144	11,244	16,895
Georgia.....	330,589	266,822	671,341	679,028	41,895	154,322	8,176	14,363
Iaho.....	67,778	36,638	120,777	119,132	7,676	15,690	3,984	3,044
Illinois.....	1,013,928	803,776	1,892,349	1,884,288	139,070	355,305	43,516	57,008
Indiana.....	385,364	290,237	837,496	831,880	63,246	149,656	21,241	26,128
Iowa.....	309,801	238,801	596,167	593,452	43,472	103,351	13,372	16,002
Kansas.....	209,707	160,372	430,354	427,379	31,499	79,161	10,921	12,170
Kentucky.....	316,292	237,071	626,343	621,185	42,709	111,637	11,522	14,819
Louisiana.....	259,400	199,905	518,257	525,295	33,893	106,649	6,809	11,233
Maine.....	102,525	80,590	188,551	187,838	17,290	37,650	5,237	6,238
Maryland.....	239,221	182,883	419,021	418,094	30,552	81,796	6,705	9,125
Massachusetts.....	598,247	594,478	934,173	933,261	77,181	202,340	14,677	21,938
Michigan.....	652,094	453,648	1,254,575	1,238,505	85,063	188,627	33,547	35,891
Minnesota.....	408,015	303,569	610,648	606,429	45,242	102,954	11,571	14,721
Mississippi.....	217,339	164,617	472,066	476,379	30,495	94,849	5,726	9,794
Missouri.....	429,984	341,598	910,812	910,728	68,918	185,077	21,908	29,996
Montana.....	86,219	44,251	125,964	123,692	9,734	19,013	4,907	3,781
Nebraska.....	163,643	125,067	304,686	303,781	21,804	51,187	6,478	7,657
Nevada.....	17,889	6,208	26,992	25,510	1,856	3,622	2,013	1,311
New Hampshire.....	61,971	53,017	110,835	110,555	10,579	23,217	3,027	3,426
New Jersey.....	562,640	479,217	981,976	979,936	70,657	186,602	9,547	14,828
New Mexico.....	58,365	39,559	110,562	109,765	8,098	16,450	2,443	2,984
New York.....	1,861,537	1,598,119	3,157,750	3,149,635	226,595	625,031	31,424	51,755
North Carolina.....	408,975	343,946	731,906	737,836	39,354	130,957	6,366	11,064
North Dakota.....	98,930	64,338	128,974	128,291	9,218	17,813	1,793	1,988
Ohio.....	832,054	670,983	1,662,583	1,647,217	122,948	297,646	41,662	53,659
Oklahoma.....	246,312	171,037	536,897	533,799	36,548	93,473	15,188	20,297
Oregon.....	139,949	85,121	272,700	269,369	19,708	47,160	12,504	11,868
Pennsylvania.....	1,330,989	1,119,812	2,207,727	2,201,633	173,763	414,612	23,994	32,064
Rhode Island.....	98,973	94,789	155,316	155,763	12,281	31,552	2,620	4,252
South Carolina.....	210,968	177,937	378,717	384,446	20,913	80,995	1,848	3,295
South Dakota.....	90,923	61,205	138,578	137,808	10,017	20,752	2,539	2,710
Tennessee.....	310,391	249,825	648,394	650,230	42,492	130,028	10,904	17,574
Texas.....	699,956	502,692	1,481,163	1,476,836	95,282	272,819	36,222	53,297
Utah.....	62,174	45,330	119,795	119,555	5,826	18,368	2,749	3,548
Mont.....	46,734	34,267	78,948	78,403	7,447	16,958	1,916	2,029
Vermont.....	341,510	254,055	573,724	572,299	37,348	111,782	8,348	11,875
Virginia.....	244,035	138,440	424,749	418,969	31,920	74,409	18,658	18,489
Washington.....	226,188	164,932	409,892	406,304	24,814	60,687	6,353	8,446
West Virginia.....	226,188	164,932	409,892	406,304	24,814	60,687	6,353	8,446
Wisconsin.....	423,760	316,735	707,719	702,248	54,530	117,556	15,203	17,604
Wyoming.....	36,944	17,160	58,360	56,865	3,698	6,967	2,154	1,875
Italy.....	16,376,595	12,751,772	30,191,087	30,087,135	2,143,552	5,700,092	624,398	822,563
Percent of each sex.....	33.2	25.8	61.2	61.0	4.3	11.5	1.3	1.7
Total.....	12,550,129	8,933,170	18,092,600	17,684,687	1,471,390	3,176,228	156,162	135,068
.....	12,967,565	9,616,902	21,849,266	21,318,933	1,758,308	3,917,625	235,284	273,304
.....	14,953,712	11,306,653	26,327,109	26,170,756	2,025,036	4,734,207	489,478	573,148

the average American family was almost persons larger 100 years ago than it is ay. In 1850 there were 5.6 persons in the age family, but by 1940 the number been reduced to 3.8.—*Encyc. Brit.*

Only two-thirds of the inhabitants of the world are enumerated by means of a census. For this reason, the estimate of more than 1,900,000,000 inhabitants of the earth can only be an approximation.

Distribution of Arrests by Sex, Jan. 1 through Dec. 31, 1945

Source: Federal Bureau of Investigation.

Offense charged	No. male	Percent	No. female	Percent	Total	Percent
Criminal homicide.....	4,732	1.0	649	0.8	5,381	1.0
Robbery.....	13,955	3.0	840	1.0	14,795	2.7
Assault.....	37,811	8.2	5,195	6.2	43,006	7.9
Burglary—breaking or entering.....	28,385	6.2	918	1.1	29,303	5.4
Larceny—steft.....	42,543	9.3	8,017	9.5	50,560	9.2
Auto theft.....	17,332	3.8	457	0.5	17,789	3.3
Embezzlement and fraud.....	8,037	1.7	1,275	1.5	9,312	1.7
Stolen property; buying, receiving, etc.....	2,782	0.6	350	0.4	3,132	0.6
Arson.....	559	0.1	55	0.1	614	0.1
Forgery and counterfeiting.....	3,524	0.8	709	0.8	4,233	0.8
Rape.....	6,702	1.5	.....	.....	6,702	1.2
Prostitution and commercialized vice.....	3,138	0.7	7,821	9.3	10,959	2.0
Other sex offenses.....	9,255	2.0	4,668	5.5	13,923	2.6
Narcotic drug laws.....	1,687	0.4	248	0.3	1,935	0.4
Weapons; carrying, possessing, etc.....	7,478	1.6	508	0.6	7,986	1.5
Offenses against family and children.....	8,495	1.8	849	1.0	9,344	1.7
Liquor laws.....	5,479	1.2	1,221	1.5	6,700	1.2
Driving while intoxicated.....	19,370	4.2	1,183	1.4	20,553	3.8
Road and driving laws.....	4,534	1.0	128	0.2	4,662	0.9
Parking violations.....	85	*	4	*	89	*
Other traffic and motor vehicle laws.....	4,213	0.9	191	0.2	4,404	0.8
Disorderly conduct.....	29,546	6.4	8,758	10.4	38,304	7.0
Drunkenness.....	110,251	24.0	14,663	17.5	124,914	22.9
Vagrancy.....	23,590	5.1	9,898	11.8	33,488	6.2
Gambling.....	11,634	2.5	1,151	1.4	12,785	2.4
Suspicion.....	30,561	6.7	5,495	6.5	36,056	6.6
Not stated.....	2,554	0.6	706	0.8	3,260	0.6
All other offenses.....	21,476	4.7	8,187	9.7	29,663	5.5
Totals.....	459,708	100.0	84,144	100.0	543,852	100.0

*Less than 1/10 of 1 percent.

Federal Prisoners Received from the Courts, by Offense, June 30, 1934 to 1945

Source: Federal Bureau of Prisons.

Note: Blank indicates data not available or law not in effect until year first report appears.

Offense	1934	1939	1944	1945
War-related offenses:				
Selective Service Act (1941-45).....	.....	.....	3,930	2,613
Other national defense laws.....	.....	.....	1,710	2,150
Military court-martial cases.....	27	32	962	1,825
Total.....	27	32	6,602	6,588
Other offenses:				
Counterfeiting and forgery.....	1,584	1,788	433	673
Embezzlement and fraud.....	.....	352	295	340
Immigration.....	2,139	2,541	2,674	3,998
Juvenile delinquency.....	.....	.....	834	911
Kidnaping.....	.....	32	31	20
Liquor laws.....	7,032	11,362	2,635	2,988
National Bank and Federal Reserve Act.....	154	167	67	51
Narcotic drug laws.....	1,733	2,610	1,306	1,134
National motor vehicle theft act.....	1,182	1,588	1,079	1,072
Postal laws.....	1,250	1,688	660	738
Theft from interstate commerce.....	420	354	362	475
White slave traffic act.....	188	396	255	209
Gov't reservation, D. C. high seas.....	493	999	991	986
Other.....	1,661	841	992	1,019
Total.....	17,836	24,718	12,614	14,612
Total all offenses.....	17,863	24,750	19,216	21,200

Penalties for Murder in the United States

State	Penalty	State	Penalty
Alabama	Electrocution	New Mexico	Electrocution
Arizona	Lethal gas	New York	Electrocution
Kansas	Electrocution	North Carolina	Lethal gas
California	Lethal gas	North Dakota	Life imprisonment
Colorado	Lethal gas	Ohio	Electrocution
Connecticut	Electrocution	Oklahoma	Electrocution
Delaware	Hanging	Oregon	Lethal gas
D.C.	Electrocution	Pennsylvania	Electrocution
Florida	Electrocution	Rhode Island	Life imprisonment
Georgia	Electrocution	South Carolina	Electrocution
Illinois	Hanging	South Dakota	Electrocution
Illinois	Electrocution	Tennessee	Electrocution
Illiana	Electrocution	Texas	Electrocution
Iowa	Hanging	Utah	Hanging
Kansas	Hanging		or shooting
Kentucky	Electrocution	Vermont	Electrocution
Louisiana	Electrocution	Virginia	Electrocution
Maine	Life imprisonment	Washington	Life imprisonment
Maryland	Hanging		or hanging
Massachusetts	Electrocution	West Virginia	Hanging
Michigan	Life imprisonment	Wisconsin	Life imprisonment
Minnesota	Life imprisonment	Wyoming	Lethal gas
Mississippi	Electrocution	U. S. (Fed. Gov't)	Death penalty
Missouri	Lethal gas		
Montana	Hanging	Alaska	Hanging
Nebraska	Electrocution	Canal Zone	Hanging
Nevada	Lethal gas	Hawaii	Electrocution
New Hampshire	Hanging	Puerto Rico	Life imprisonment
New Jersey	Electrocution	Virgin Islands	Hanging

Selective Service Act Violators, June 30, 1941 to 1945

Source: Federal Bureau of Prisons.

	1941	1942	1943	1944	1945	Total
Received from the courts into Federal institutions	196	806	2,764	3,585	2,477	9,828
Conscientious objectors	*	*	*	251	214	*
Mohavah's Witnesses	*	*	*	1,735	899	*
Others	*	*	*	1,599	1,364	*
Average age (years)	*	28.5	29.9	27.4	27.0	*
Average length of sentence (mo.)	12.0†	21.0	32.4	35.2	32.7	32.2
Conscientious objectors	*	*	*	34.0	30.9	*
Mohavah's Witnesses	*	*	*	42.0	40.1	*
Others	*	*	*	28.1	28.0	*
Length of sentence in Federal institutions, June 30	161	706	2,650	4,679	4,703	*
Conscientious objectors	*	*	588	694	475	*
Mohavah's Witnesses	*	*	981	2,530	2,724	*
Others	*	*	1,081	1,455	1,504	*
Paroles granted	12	79	405	928	1,112	2,536
U. S. Board of Parole	*	9	140	428	400	977
Under Executive order no. 8641	12	70	265	500	712	1,559

Data not available †Estimated.

Percent of Driver Violations in Fatal Traffic Accidents, 1945

Source: National Safety Council.

Type of accident	Total fatal accidents	Under also-holic influence	Excess of speed limit	Exceeded safety speed	Did not have right of way	Improper passing	Wrong side of road	Improper turning	Disregarded signals	Other violations	Total violations unreported
(Urban)											
Pedestrian.....	100	3	5	5	4	*	1	1	*	18	66
Other motor vehicle.....	100	4	12	7	16	2	9	2	7	12	31
Railroad train.....	100	3	9	4	20	1	1	1	51	11	13
Street car.....	100	3	8	18	15	3	20	*	5	8	23
Bicycle.....	100	*	5	7	6	2	2	2	2	17	57
Fixed object.....	100	7	26	37	2	1	2	1	3	16	15
Overtaken in roadway.....	100	14	35	22	2	*	*	*	2	20	14
Ran off roadway.....	100	19	35	23	6	*	7	3	2	18	14
Miscellaneous.....	100	1	2	5	*	1	1	1	*	9	71
Total all types.....	100	4	9	8	8	1	4	1	5	15	49
(Rural)†											
Pedestrian.....	100	3	5	10	4	1	2	*	1	20	62
Other motor vehicle.....	100	10	12	14	14	5	26	2	5	18	48
Railroad train.....	100	4	6	12	32	1	*	0	40	20	9
Bicycle.....	100	4	4	8	5	1	2	1	0	18	64
Fixed Object.....	100	11	33	27	2	*	7	*	2	20	14
Overtaken in roadway.....	100	17	38	21	2	1	5	1	2	16	20
Ran off roadway.....	100	19	35	27	11	1	6	1	4	18	19
Miscellaneous.....	100	5	4	3	3	1	2	2	1	12	71
Total all types.....	100	8	14	14	9	2	11	1	4	16	38
Pedestrian actions (Urban)											
Crossing at intersection.....	100	3	7	5	10	*	1	1	1	14	60
Crossing between intersections.....	100	2	4	4	1	*	1	*	*	16	73
Coming from behind parked cars.....	100	2	3	3	2	*	1	1	1	10	79
Walking in roadway against traffic.....	100	5	6	5	2	1	5	1	*	26	45
Getting on or off street car, etc.....	100	4	13	9	9	17	*	*	*	22	35
Playing in roadway.....	100	1	1	3	1	*	*	*	*	15	80
Working in roadway.....	100	5	8	3	3	2	3	*	2	25	34
Others.....	100	5	6	9	5	1	2	2	1	20	46
Total actions.....	100	3	5	4	4	*	1	1	1	16	64
(Rural)‡											
Crossing at intersection....	100	3	6	7	14	*	2	*	2	11	67
Crossing between intersections.....	100	1	1	8	2	1	1	*	1	8	71
Coming from behind parked cars.....	100	*	4	9	3	*	*	*	*	9	76
Walking in roadway with traffic.....	100	5	2	14	4	1	3	1	1	25	53
Walking in roadway against traffic.....	100	3	9	7	5	2	3	1	1	17	62
Getting on or off street car, etc.....	100	*	13	9	4	4	*	*	*	30	44
Working in roadway.....	100	6	8	17	2	2	6	1	1	33	27
Others.....	100	4	1	9	4	1	1	0	*	23	36
Total actions.....	100	3	3	10	4	1	2	*	1	18	59

*Less than one-half of one percent.

†Driver violations associated with rural pedestrian actions were infrequent; the most important being unsafe speed, or violation on right-of-way.

‡In rural areas, much the same pattern as in urban accidents is seen. In non-collision accidents speed is by far the most important violation.

Hospital Facilities

Source: American Medical Association.

State	General			Nervous and Mental			Tuberculosis		
	Hospitals	Beds	Patients admitted	Hospitals	Beds	Patients admitted	Hospitals	Beds	Patients admitted
Alabama	83	13,453	223,461	7	9,239	15,005	8	565	1,175
Alaska	50	6,094	85,438	2	1,173	668	13	1,540	4,329
Arizona	56	8,924	147,094	2	6,604	3,263	2	1,349	1,593
Arkansas	303	102,098	1,340,663	36	38,781	25,964	30	4,855	4,969
California	68	15,542	186,936	9	6,823	3,240	13	1,175	770
Colorado	42	7,844	193,521	15	11,851	4,960	7	1,828	1,622
Connecticut	12	1,799	30,373	2	1,750	366	3	216	159
Delaware	17	8,066	115,219	2	8,122	2,966	1	610	519
District of Columbia	107	25,153	380,622	5	6,280	3,612	5	680	584
Florida	110	25,629	373,908	5	10,268	4,486	3	879	819
Georgia	40	6,829	68,028	3	1,773	264	...	...	...
Idaho	219	48,766	912,975	32	48,475	16,806	32	4,244	4,227
Illinois	101	14,772	313,267	12	13,176	6,533	11	1,690	1,873
Indiana	105	13,460	236,703	12	13,086	3,909	5	677	476
Iowa	105	13,611	218,271	8	7,402	1,376	2	541	324
Kansas	73	11,714	208,413	8	9,205	4,847	6	1,239	1,676
Kentucky	72	17,063	291,935	6	8,110	3,276	5	460	520
Louisiana	53	4,426	80,494	5	3,947	725	4	506	537
Maine	49	15,735	216,112	15	11,578	4,686	6	1,560	1,378
Massachusetts	141	36,482	524,011	31	32,078	12,188	21	3,916	4,315
Michigan	183	34,463	547,174	20	28,155	8,478	23	3,854	4,819
Minnesota	162	12,672	338,148	12	16,525	3,995	15	2,026	1,657
Mississippi	90	12,177	219,528	5	5,738	3,052	1	425	521
Missouri	96	22,799	331,788	16	16,326	4,220	5	1,967	1,603
Montana	50	3,382	76,486	1	1,920	442	1	250	249
Nebraska	91	6,580	139,206	5	5,956	863	1	200	172
Nevada	13	999	18,939	1	370	73	...	...	...
New Hampshire	35	2,974	56,887	2	3,053	815	2	240	137
New Jersey	90	26,683	423,605	20	26,532	8,049	16	4,172	4,144
New Mexico	44	5,600	67,349	3	1,061	498	5	558	750
New York	343	92,209	1,574,400	57	106,439	30,536	53	11,220	11,318
North Carolina	129	22,797	376,210	8	8,995	3,264	20	3,084	3,982
North Dakota	41	2,755	81,683	2	3,018	469	1	350	185
Ohio	154	27,571	635,336	23	29,119	8,795	22	3,035	3,253
Oklahoma	111	15,157	207,265	9	9,564	3,526	5	813	936
Oregon	64	8,131	162,081	5	6,254	2,160	4	405	508
Pennsylvania	231	46,046	871,308	42	48,200	10,837	16	5,164	3,961
Rhode Island	15	5,030	71,588	3	4,112	948	4	998	2,555
South Carolina	62	10,544	196,694	3	5,759	1,615	5	862	981
South Dakota	46	3,266	76,081	3	3,328	725	2	327	264
Tennessee	87	25,169	274,173	11	9,304	6,497	7	1,206	1,558
Texas	339	52,733	864,891	17	18,162	8,737	15	2,115	3,036
Utah	32	6,709	82,135	1	1,200	420	1	100	77
Vermont	21	1,477	36,224	4	2,315	619	3	175	225
Virginia	95	30,961	398,883	10	12,878	7,620	7	1,548	1,401
Washington	90	19,728	340,053	6	9,771	3,298	11	1,510	2,610
West Virginia	63	10,484	183,306	5	4,326	1,870	5	1,355	1,423
Wisconsin	137	14,021	343,304	49	17,513	6,776	21	2,251	1,952
Wyoming	24	1,967	40,741	3	1,779	539	1	34	44
Average 1927	4,322	354,364	...	563	373,364	...	508	63,170	...
1932	4,305	395,543	6,303,543	624	479,548	169,851	512	69,676	93,112
1937	4,245	412,091	8,349,773	579	570,616	195,624	508	76,751	101,839
1942	4,557	594,260	11,634,288	586	646,118	214,117	468	82,372	101,526
1943	4,885	850,576	14,454,638	575	650,993	208,677	455	79,860	91,674
1944	4,833	925,818	15,060,403	566	648,745	226,393	453	79,848	88,281
1945	4,744	922,549	15,228,270	563	657,393	248,876	449	78,774	86,186

The familiar carrot was seldom used as vegetable in the United States before 1941. However, 18,000,000 bush-year were produced, with California, New York and New Jersey the large producers.

Whole milk is eighty-seven percent water. Eggs are 74 percent water; fish, 82.6 percent; peaches, 89 percent; watermelon, 92.4 percent; and even porterhouse steak is 60 percent water.

—Encyc. Brit.

World Life Expectancy

Country	Years	Sex	0	1	10	20	Age 30	40	50	60	70
Australia	1932-34	M	63.48	65.49	58.02	48.84	39.90	31.11	22.83	15.57	9.64
		F	67.14	68.67	61.02	51.67	42.77	34.04	25.58	17.74	10.90
Austria	1930-33	M	54.47	60.55	54.08	45.18	36.86	28.65	20.96	14.15	8.70
		F	58.53	63.46	56.96	48.03	39.59	31.13	22.94	15.42	9.21
Belgium	1928-32	M	56.02	61.25	54.88	46.04	37.78	29.48	21.61	14.53	8.65
		F	59.79	63.84	57.25	48.43	40.17	31.77	23.55	15.93	9.60
Brazil	1920	Both	37.43	45.26	44.28	36.33	30.34	24.36	18.61	13.33	8.70
Bulgaria	1925-28	M	45.92	54.37	53.75	45.78	38.45	30.70	23.23	16.45	10.88
		F	46.64	53.73	53.20	45.45	38.97	31.73	24.32	17.18	11.05
Canada	1940-42	M	66.14	58.70	49.51	40.73	31.87	23.49	16.06	9.94	5.94
		F	68.73	61.08	51.76	42.81	33.99	25.46	17.62	10.93	7.03
Costa Rica	1927	Both	40.69	49.04	46.14	37.91	30.85	24.06	17.48	11.60	7.03
Czechoslovakia	1929-32	M	51.92	59.90	54.04	45.29	37.15	28.96	21.24	14.35	8.67
		F	55.18	61.96	56.10	47.40	39.24	30.98	22.83	22.83	9.24
Denmark	1936-40	M	63.50	67.40	59.60	50.30	41.20	32.20	23.70	16.00	9.60
		F	65.80	68.50	60.60	51.10	42.00	33.10	24.50	16.00	10.00
Egypt	1917-27	M	31.00	38.06	32.92	27.80	22.82	18.07	13.65	9.63	5.63
		F	36.00	41.64	35.77	30.04	24.53	19.36	14.58	10.27	6.27
Eire	1940-42	M	59.00	56.30	47.20	34.80	26.50	18.80	12.30	7.30	4.30
		F	61.00	56.90	48.00	35.80	27.60	19.80	13.30	8.30	5.30
Finland	1931-40	M	54.45	57.95	51.73	43.34	35.89	28.12	20.86	14.57	9.51
		F	59.55	62.51	56.24	47.89	40.15	32.07	23.97	16.41	10.06
France	1928-33	M	54.30	58.63	52.06	43.30	35.42	27.62	20.33	13.76	8.25
		F	59.02	62.53	55.95	47.40	39.54	31.37	23.39	15.94	9.58
Germany	1932-34	M	59.86	64.43	57.28	48.16	39.47	30.83	22.54	15.11	9.05
		F	62.81	66.41	59.09	49.84	41.05	32.33	23.85	16.07	9.58
Greece	1928	M	49.09	53.22	52.40	44.31	37.07	29.76	22.58	16.03	10.57
		F	50.89	55.09	54.48	46.43	39.45	32.40	24.93	17.49	10.95
Hungary	1930-31	M	48.27	57.11	52.23	43.75	36.01	28.06	20.43	13.50	7.75
		F	51.34	58.78	53.96	45.77	38.30	30.35	22.35	14.95	8.72
India	1931	M	26.91	34.68	36.38	29.57	23.60	18.60	14.31	10.25	6.35
		F	26.56	33.48	33.61	27.08	23.30	18.23	14.65	10.81	6.74
Italy	1930-32	M	53.76	59.71	55.46	46.75	38.58	30.39	22.45	15.16	9.05
		F	56.00	61.32	57.15	48.49	40.41	32.14	23.89	16.13	9.61
Japan	1935-36	M	46.92	51.95	48.25	40.41	33.89	26.22	18.95	12.55	7.65
		F	49.63	54.07	50.47	43.22	36.88	29.65	22.15	15.07	9.04
Netherlands	1931-40	M	65.70	67.80	60.30	51.00	41.90	32.90	24.10	16.30	9.80
		F	67.20	68.60	60.80	51.50	42.30	33.30	24.70	16.80	10.20
New Zealand	1934-38	M	65.46	66.92	59.11	49.89	40.94	32.03	23.64	16.06	9.82
		F	68.45	69.45	61.45	52.02	42.98	34.05	25.47	17.49	10.73
Norway	1921-31	M	60.98	63.51	56.27	47.73	40.39	32.40	24.41	16.97	10.63
		F	63.84	65.76	58.35	49.85	42.14	34.00	25.87	18.16	11.40
Poland	1931-32	M	48.20	56.90	52.20	43.70	36.00	27.90	20.30	13.70	8.30
		F	51.40	58.70	54.00	45.70	38.00	30.30	22.40	15.10	9.20
South Africa*	1940	M	61.46	56.63	47.32	34.36	25.92	18.54	12.22	7.22	4.22
(White)		F	66.08	60.08	50.96	37.67	29.04	20.98	13.63	8.63	5.63
(Colored)	1935-37	M	40.18	48.14	46.53	38.78	32.10	25.69	19.74	14.08	9.49
		F	40.86	47.74	46.33	39.13	33.41	27.29	20.96	15.07	10.23
Sweden	1936-40	M	64.30	66.46	58.77	49.70	41.13	32.37	23.97	16.35	9.52
		F	66.92	68.40	60.46	51.27	42.48	33.67	25.12	17.19	10.37
Switzerland	1933-37	M	60.70	63.00	55.60	46.40	38.00	29.40	21.30	14.30	8.70
		F	64.60	66.40	58.80	49.60	40.90	32.20	23.70	16.00	9.60
U. S. S. R.	1926-27	M	41.93	51.40	51.65	43.24	35.65	28.02	20.99	14.85	9.65
(European)		F	46.79	55.46	55.72	47.36	39.75	32.12	24.41	17.07	10.95
United Kingdom	1937	M	60.18	63.33	56.25	47.10	38.32	29.57	21.40	14.32	8.58
(Eng. & Wales)		F	64.40	66.79	59.59	50.40	41.60	32.78	24.28	16.48	9.97
Northern Ireland	1925-27	M	55.42	59.93	54.42	45.63	37.46	29.28	21.55	14.79	9.36
		F	56.11	59.48	53.73	45.22	37.42	29.65	21.18	15.55	10.10
Scotland	1930-32	M	56.00	60.70	54.90	46.00	37.40	29.10	21.30	14.10	8.40
		F	59.50	63.10	57.20	48.30	39.80	31.40	23.30	15.90	9.60
United States	1942	M	63.65	65.49	57.34	48.02	39.07	30.27	22.18	15.25	9.63
(White)		F	68.61	69.99	61.74	52.19	42.92	33.86	25.25	17.42	10.87
(Other)	1942	M	54.28	57.42	49.63	40.73	33.04	25.92	19.80	14.85	10.72
		F	58.00	60.60	52.70	43.81	35.94	28.51	22.08	17.01	13.12

*Uses 35, 45, 55 and 65 years as bases instead of multiples after 30.

Motor Vehicle Laws as of June 1, 1946

Source: American Automobile Association.

State	Speed limit (R=rea- sonable)	Date new license plates can be used	Driving license		Gasoline tax	Percent sales tax	Period of stay ¹	Safety respon- sibility law	Certifi- cate of title required
			Re- quired	Minimum age					
Alabama.....	R	Oct. 1	yes	16	\$.06	½ ²	Reciprocal	no	no
Arizona.....	60	On issue	yes	16	.05	2	3	yes	yes
Arkansas.....	55	Nov. 1	yes	18	.065	2	90 days	no	no
California.....	55	Jan. 2	yes	16	.03	2½	3	yes	yes
Colorado.....	60	On issue	yes	16	.04	2	Reciprocal	yes	yes
Connecticut.....	40	Feb. 15	yes	16	.03	...	Reciprocal	yes	no
Delaware.....	50	4	yes	16	.04	...	Reciprocal	yes	yes
D.C.....	25	Mar. 1	yes	18	.03	...	Reciprocal	yes	yes
Florida.....	R	Dec. 1	yes	16	.07	...	Reciprocal	no	yes
Georgia.....	55	Jan. 1	yes	16	.06	...	30 days	no	no
Idaho.....	R	Jan. 1	yes	16	.051	...	Reciprocal	yes	yes
Illinois.....	R	On issue	yes	15	.03	2	Reciprocal	yes	yes
Indiana.....	R	Feb. 1	yes	18	.04	...	60 days	yes	yes
Iowa.....	R	Dec. 1	yes	16	.03	2	Reciprocal	yes	no
Kansas.....	R	Dec. 1	yes	16	.03	2	Reciprocal	yes	yes
Kentucky.....	45	Dec. 29	yes	18	.05	3½	Reciprocal	yes	6
Louisiana.....	R	Dec. 1	no	14	.07	1	Reciprocal	no	no
Maine.....	45	Dec. 25	yes	15	.04	7	Reciprocal	yes	no
Maryland.....	50	Mar. 15	yes	16	.04	...	Reciprocal	yes	yes
Massachusetts.....	R	Jan. 1	yes	16	.03	7	Reciprocal ⁸	9	no
Michigan.....	R	On issue	yes	14	.03	3	90 days	yes	yes
Minnesota.....	60	Jan. 1	yes	15	.04	...	Reciprocal	yes	no
Mississippi.....	55	Nov. 1	yes	17	.06	1	25 days	no	no
Missouri.....	R	Jan. 1	yes	16	.02	2	Reciprocal	no	yes
Montana.....	30	Jan. 1	yes	15	.05	...	30 days	yes	yes
Nebraska.....	60	Jan. 1	yes	16	.05	...	3	yes	10
Nevada.....	R	Dec. 15	yes	16	.04	...	No limit	no	yes
New Hampshire.....	R	Mar. 1	yes	16	.04	...	Reciprocal	yes	no
New Jersey.....	45	Mar. 1	yes	17	.03	...	Reciprocal	yes	6
New Mexico.....	45	Dec. 1	yes	14	.05	1	90 days	no	yes
New York.....	50	Jan. 1	yes	18	.04	...	Reciprocal	yes	no
North Carolina.....	50	Dec. 1	yes	15	.06	3½	Reciprocal	yes	yes
North Dakota.....	50	Jan. 1	yes	16	.04	2	Reciprocal	yes	yes
Ohio.....	50	Mar. 1	yes	16	.04	3	Reciprocal	yes	yes
Oklahoma.....	45	Dec. 21	yes	16	.055	2	Reciprocal	no	yes
Oregon.....	55	Dec. 15	yes	16	.05	...	Reciprocal	yes	yes
Pennsylvania.....	50	Mar. 15	yes	18	.04	...	Reciprocal	yes	yes
Rhode Island.....	45	Mar. 1	yes	16	.03	...	Reciprocal	yes	no
South Carolina.....	55	On issue	yes	14	.06	...	90 days	no	no
South Dakota.....	60	Jan. 1	no	15	.04	2½	90 days	yes	yes
Tennessee.....	50	Mar. 1	yes	16	.07	...	30 days	yes	6
Texas.....	60	Mar. 1	yes	16	.04	1	Reciprocal	no	yes
Utah.....	60	Dec. 15	yes	16	.04	2	60 days	no	yes
Mont.	50	Mar. 15	yes	18	.04	...	Reciprocal	yes	no
Virginia.....	55	Mar. 15	yes	16	.05	...	Reciprocal	yes	yes
Washington.....	50	Dec. 1	yes	16	.05	3	Reciprocal	yes	yes
West Virginia.....	45	June 20	yes	16	.05	2	90 days	yes	yes
Wisconsin.....	R	Nov. 1	yes	16	.04	...	Reciprocal	yes	yes
Wyoming.....	60	Dec. 1	no	15	.04	2	90 days	no	yes

Applies to nonresidents. The term "reciprocal" means that the state will extend to a nonresident the identical privileges granted by his home state to nonresident motorists. In some states visitors must register within specified time. In most states persons who intend to reside permanently must buy new plates and secure new driving license at once, or within a limited period. Acquisition of employment or placing children in public school is often considered intention to reside permanently.

¹None on used cars.

²Until expiration of home registration.

³Three months before current registration expires.

⁴Use tax on new cars, first registration of used cars.

⁵Bill of sale must be filed.

⁶Excise tax.

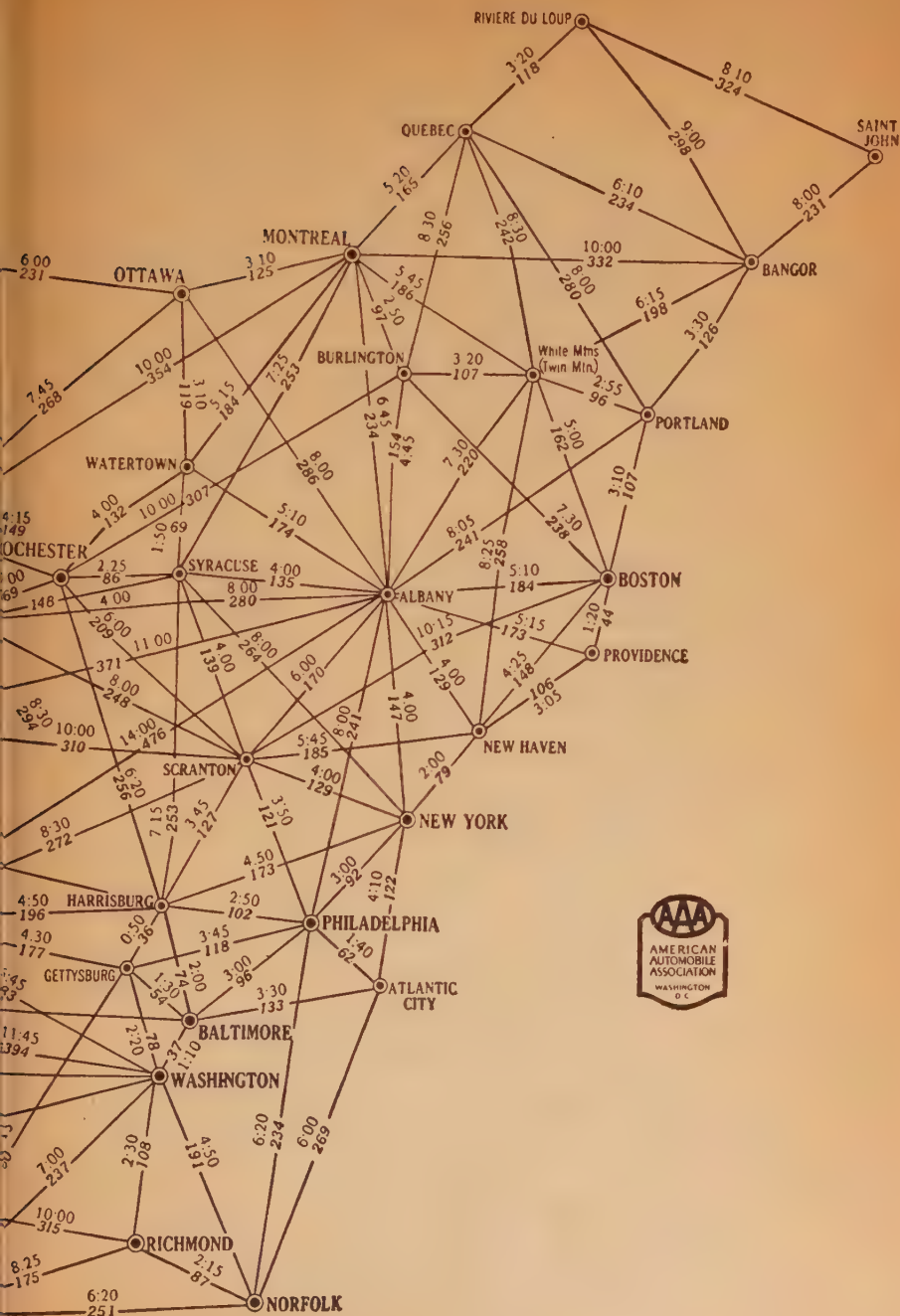
⁷Permit showing compliance with state compulsory liability insurance law must be obtained after 30 days.

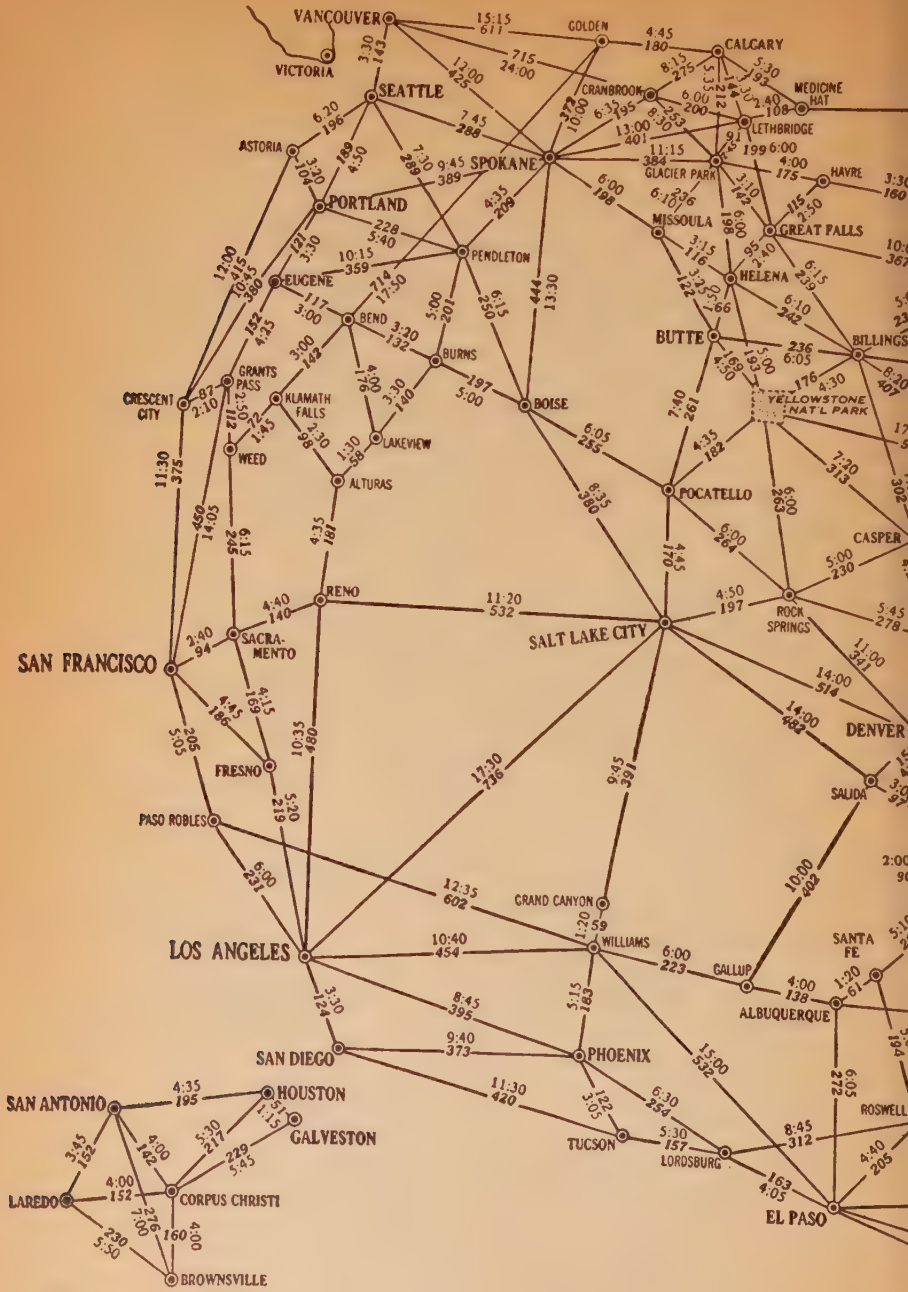
⁸State has compulsory insurance.

⁹For cars not previously registered in state and for those being transferred to another owner.

¹⁰\$15 maximum.

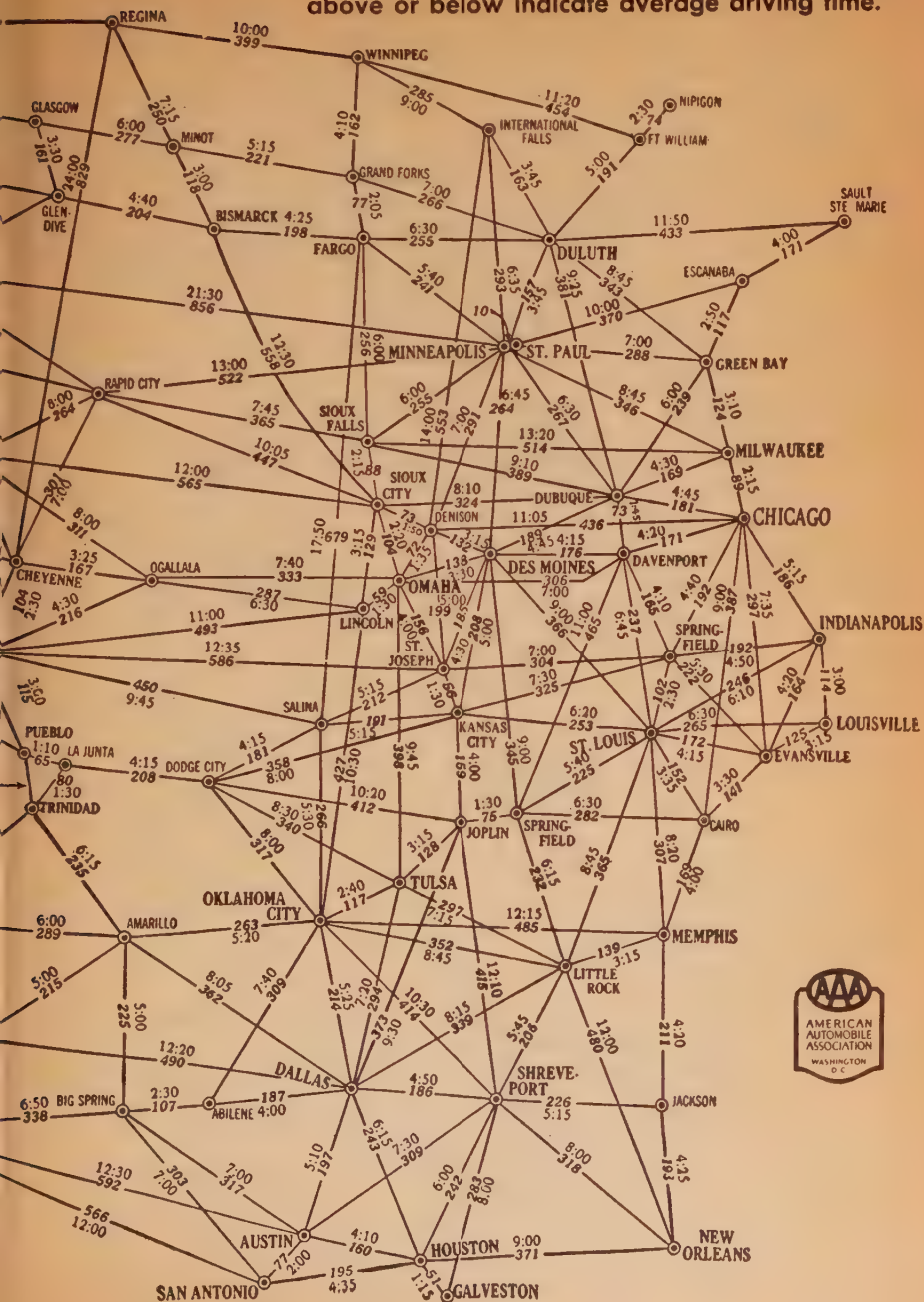
¹¹Registry tax on first registration in state.





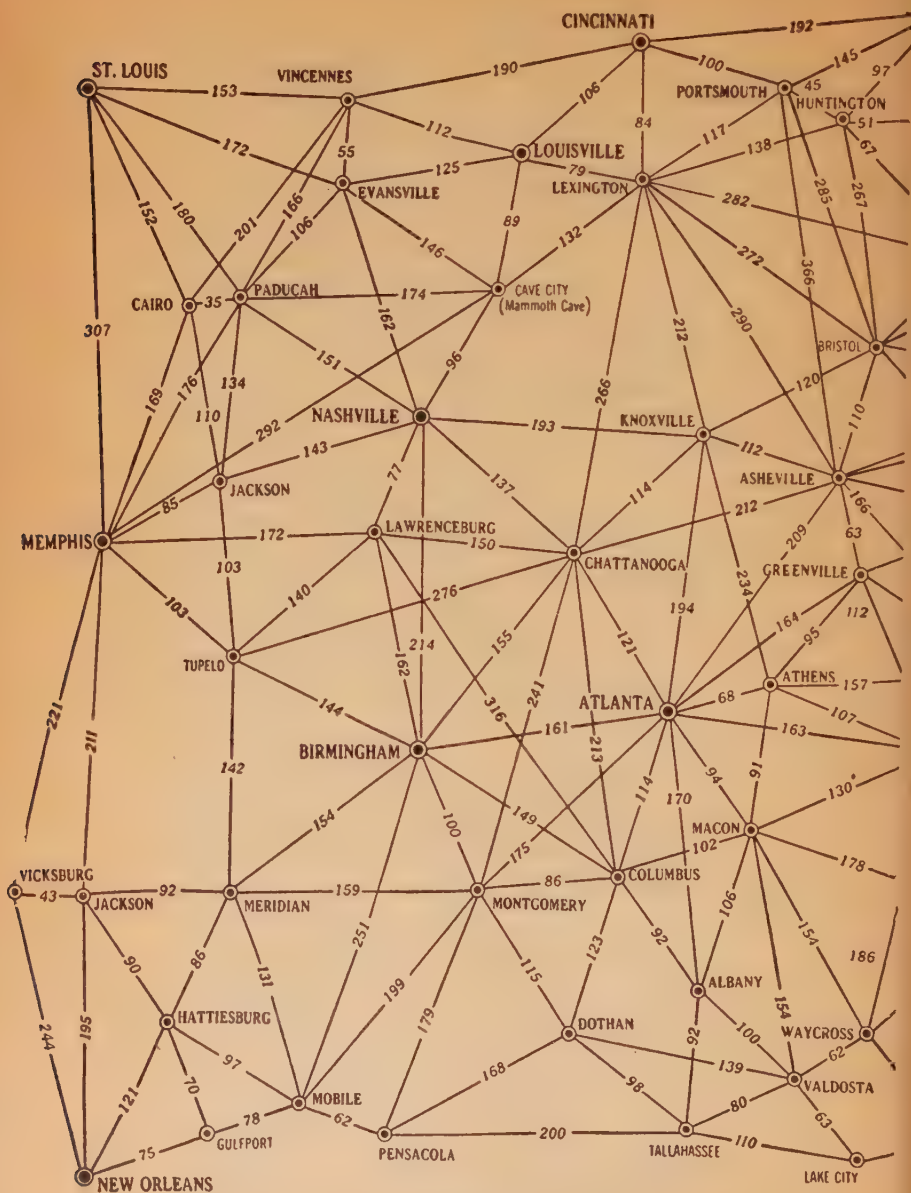
WESTERN MILEAGE CHART

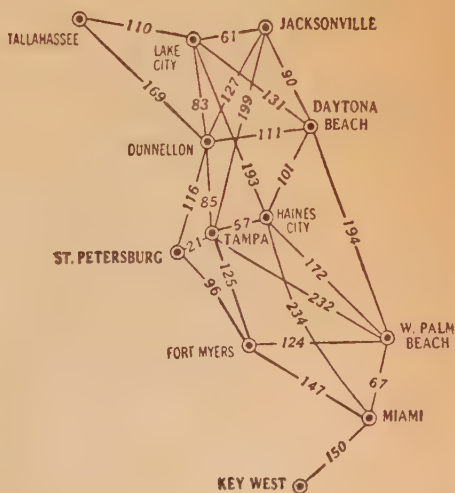
Numerals set into lines indicate mileage. Numerals above or below indicate average driving time.



SOUTHEASTERN MILEAGE CHART

Numerals are mileages between towns.





ELEMENTARY AND SECONDARY SCHOOL STATISTICS, BY STATE, 1944-45

Source: Official State Educational Authorities.

The figures covering teachers do not include either supervisors or the school principal. The figures covering students only include full-time students. The figures on schools include rural schools.

State	Elementary			Secondary			Average yearly expendi- ture per pupil	Average yearly salary of teachers
	No. schools	No. pupils	No. teachers	No. schools	No. pupils	No. teachers		
Alabama.....	3,407	443,146	12,522	591	196,476	6,943	\$49.20	\$1,015
Arizona*	421	98,561	2,585	67	24,330	864	105.73	2,127
Arkansas.....	3,732	336,642	8,663	727	65,020	3,763	53.98	937
California.....	3,570	919,592	.....	689	335,911	.....	143.19	.....
Colorado.....	1,955†	146,404†	5,507*	358†	44,594†	2,464*	125.51†	1,811*
Connecticut.....	766	166,981	5,374	132	78,323	3,354	134.89	2,146
Delaware.....	127	26,105	852	46	16,210	737	137.30	1,940
D. C.	128	58,947	1,581	35	39,493	1,573	161.37†	2,700*
Florida.....	1,731	251,491	7,720	775	144,861	5,325	93.66	1,620.95
Georgia.....	3,507	581,858	16,159	1,355	136,350	6,185	66.84	1,289.55
Idaho†.....	1,085	.....	.....	186	.....	.....	89.88	1,115
Illinois.....	11,306	830,671	23,717	911	317,524	10,145	139.43	1,595.23
Indiana.....	2,941	625,587	11,579	.....	.....	7,490	.....	.....
Iowa.....	9,171	238,608	15,689	874	215,634	6,136	.....	.....
Kansas.....	7,064§	.....	.....	718§	.....	.....	91.70†	1,021†
Kentucky.....	5,875	415,823	12,036	608	112,067	4,649	60.76	1,094
Louisiana.....	2,514	346,650	10,200	558	84,829	4,112	73.68	1,437.37
Maine.....	1,498	115,811	4,310	93	30,117	1,603	83.25	1,539.30
Maryland.....	943	232,694	5,839	208	63,476	3,204	94.23	2,063
Massachusetts.....	1,887	363,055	13,446	440	229,117	10,416	135.96	2,258
Michigan.....	4,823	588,598	19,548	680	345,608	12,711	116.47	2,092.89
Minnesota.....	8,207	303,650	12,007	649	160,515	7,516	123.00	1,926
Mississippi.....	4,662	489,666	10,921	657	69,195	3,442	36.66	847
Missouri.....	7,925	473,418	.....	815	147,426	.....	128.47	1,456
Montana.....	1,534	66,303	3,401	190	24,605	1,307	.....	1,530.40
Nebraska.....	7,118	165,554	9,030	616	65,112	3,153	127.52	1,343.11
Nevada.....	201	19,738	700	36	5,888	280	146.40	1,954.40
New Hampshire.....	1,640	47,993	1,993	88	17,594	922	123.75	1,755
New Jersey.....	1,582	435,187	15,676	340	199,993	9,416	179.56	2,447.12
New Mexico**.....	.....	.....	.....	.....	.....	.....	.....	1,655.38
New York.....	7,165	1,261,413	43,418	1,000	578,603	28,388	190.50	.....
North Carolina.....	3,480	683,746	19,357	978	129,080	5,176	64.05†	1,215.63†
North Dakota.....	3,228	88,378	.....	176	27,154	.....	115.96	1,302.98
Ohio.....	3,502	688,283	21,434	1,242	413,807	17,284	119.50	2,055.44
Oklahoma.....	3,204	11,285	1,134	848	4,884	792	73.16	1,623
Oregon.....	1,260	169,720	5,316	238	64,446	2,847	143.09	1,997.59
Pennsylvania.....	8,913	975,096	33,593	1,250	564,584	23,246	122.00	.....
Rhode Island.....	325	57,185	2,002	63	37,862	1,801	133.77	2,081.30
South Carolina.....	3,578	358,777	11,411	494	91,451	3,678	66.50	999
South Dakota.....	4,011	84,100	5,411	326	28,724	1,705	135.81	1,328.22
Tennessee.....	5,000	415,375	14,700	516	94,857	4,700	65.00	1,212.50
Texas.....	6,698	959,253	28,015	2,376	277,412	14,608	88.00	1,480
Utah.....	370	80,915	2,477	156	58,023	1,892	116.84	1,848.72
Vermont.....	879	38,089	1,735	87	14,318	675	118.25	1,436.76
Virginia.....	3,286	425,574	11,064	563	124,081	4,240	80.38	1,381
Washington.....	1,244	263,384	7,442	363	115,016	4,254	156.64	2,303.82
West Virginia.....	4,229	283,989	10,010	380	126,684	5,094	.....	.....
Wisconsin.....	6,228	343,369	14,039	460	141,665	6,146	127.00	.....
Wyoming.....	601	38,081	1,663	87	13,015	857	185.09	1,630*

*1945-46. †1943-44. ‡1941-42. §1939-40. **Number of pupils 122,235; number of teachers 1,539. These figures include both elementary and secondary schools.

EDUCATION

By LYMAN BRYSON

Professor of Education, Columbia University

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No tables of figures can show the whole picture of education in the United States in 1946 because the college classrooms are bulging with veterans, as yet uncounted, and new forms of education are developing in swift and unexpected ways. The chancellor of one of the greatest of American universities, Robert M. Hutchins of the University of Chicago, has taken a leave of absence to help prepare books for adults to read in the pursuit of self-education and to organize groups where men and women can talk about great ideas. This shows the present importance of education on the level of mature citizenship. In that same effort, the newspaper and magazine press, the cinema, broadcasting, and the museums, libraries and art galleries of the United States are all involved. The generation that did not fight the war is busily trying to understand what happened and what can be done to straighten out the world.

In the meantime, by the provisions of the G. I. Bill of Rights, the veterans of the generation that did fight the war are crowding into the colleges. Many of them have their wives and children with them. Some have to go to colleges set up for their use, like those in New York State, a few men have even broken into the colleges founded and run heretofore for women. The teachers in all these schools have found that the veterans are serious students, not afraid to ask questions, not easily satisfied with stock answers.

No one can predict how long the G. I. students will stick at their difficult task of getting an education. The methods of teaching in the colleges have been only slightly affected by the tricks of conveying information that were developed for war purposes and it is possible that the more leisurely but more really educative ways of the conventional classrooms may try the patience of men who learned quickly for quick application.

College administrators and heads of secondary schools, all over the country, are wondering in the meantime what they are going to do with the young men and women who would have gone to college in normal times and now cannot get in because the veterans are ahead of them. That situation would be somewhat changed if Congress should decree military training. This would relieve the pressure on the colleges. Whether or not it would be in itself "education" is still hotly debated. The military authorities have advocated it for security reasons.

A part of education and one of the major duties of the universities is to add to the sum of human knowledge. In 1946, the universities were aided in the development of a number of major research projects in the physical sciences by large appropriations from the armed services. Facilities for laboratory work left over from the war were in some instances made available for new projects in which the services will have a hand for security reasons but from which the results, it is hoped, will benefit mankind. A good example of this is the nuclear physics laboratory to be set up at Camp Upton on Long Island. It seems unlikely, however, in spite of much discussion that any bill for government subsidies to free scientific inquiry will be passed in the immediate future.

On a par in importance and general interest with the work in the physical sciences, encouraged by the experiments with atomic energy, is the new concern with education and cultural exchanges for international friendship. This is as much a result of the discoveries in physics as were the new laboratories but the interest in education for international collaboration is based more on hope and less on accomplished fact. The high schools and colleges of the country have been more than ever active in the study of foreign relations and other national cultures while the representatives of the great educational societies of the United States have been considering, at the call of the State Department, what part we are to play in the sessions of UNESCO, the United Nations Educational, Scientific and Cultural Organization which met in the autumn of 1946, in Paris.

These things are the superstructure of American education. The safe underpinning of the intellectual and cultural life of the American people, is in the public, parochial and private schools where nearly thirty millions of children learn the ways of American life. These schools, as is shown by the figures, have been for several generations taking care of the earliest needs of a larger and larger proportion of our child population. Since the turn of the century, in spite of two great wars, and through several depressions, the schools have grown in depth and extent of service. In many an American town the public schoolhouse is the finest building. In our greatest cities the schools are still the centers of cohesion and amalgamation where we are forged into one people.

Compulsory School Attendance Laws

Source: National Education Association.

State	Date of enactment	Age limits	Minimum period of compulsory attendance
Alabama	1915	8-16	100 days
Arizona	1899	8-16	Full school year
Arkansas	1909	7-15	Three-fourths school year
California	1874	8-16	Full school year
Colorado	1889	8-16	Full school year
Connecticut	1872	7-16	Full school year
Delaware	1907	7-17	160 days
D. C.	1864	7-16	Full school year
Florida	1915	7-16	Full school year
Georgia	1916	8-14	120 days
Idaho	1887	8-18	Full school year
Illinois	1883	7-16	Full school year
Indiana	1897	7-16	Full school year
Iowa	1902	7-16	120 days
Kansas	1874	7-16	Full school year
Kentucky	1896	7-16	Full school year
Louisiana	1910	7-14	140 days
Maine	1875	7-16	Full school year
Maryland	1902	7-16	Full school year
Massachusetts	1852	7-16	Full school year
Michigan	1871	7-16	Full school year
Minnesota	1885	8-16	Full school year
Mississippi	1918	7-14	80 days
Missouri	1905	7-16	Full school year
Montana	1883	8-16	Full school year
Nebraska	1887	7-16	120 days
Nevada	1873	7-18	Full school year
New Hampshire	1871	8-16	Full school year
New Jersey	1875	7-16	Full school year
New Mexico	1891	6-16	Full school year
New York	1874	8-16	Full school year
North Carolina	1907	7-14	Full school year
North Dakota	1883	7-15	Full school year
Ohio	1877	6-18	Full school year
Oklahoma	1907	8-18	Two-thirds school year
Oregon	1889	9-15	Full school year
Pennsylvania	1895	8-16	Full school year
Rhode Island	1883	7-16	Full school year
South Carolina	1915	8-14	80 days
South Dakota	1883	8-17	Full school year
Tennessee	1905	7-16	Full school year
Texas	1915	8-14	100 days
Utah	1890	8-18	100 days
Vermont	1867	8-16	170 days
Virginia	1908	8-14	Full school year
Washington	1871	8-16	Full school year
West Virginia	1897	7-16	Full school year
Wisconsin	1879	7-16	120 days
Wyoming	1876	7-16	Full school year

Statistics of State School Systems, 1919 to 1943

Source: Council of State Governments.

Years	Enrollment					High-school graduates		Expense per pupil in average daily attendance	Value of textbooks free to pupils
	Total	Elementary schools		Secondary schools					
		Boys	Girls	Boys	Girls	Boys	Girls		
1919-1920 . . .	21,578,216	9,781,793	9,596,134	992,664	1,207,725	107,893	167,345	\$54.65	\$11,786,495
1929-1930 . . .	25,678,015	10,842,257	10,436,334	2,115,228	2,284,194	273,404	331,837	86.70	25,150,281
1933-1934 . . .	26,434,193	10,645,991	10,119,046	2,802,122	2,867,034	396,016	440,909	67.48	12,715,857
1935-1936 . . .	26,367,098	10,455,192	9,937,369	2,948,765	3,025,772	447,409	484,874	74.30	22,595,179
1937-1938 . . .	25,975,108	10,153,007	9,595,167	3,032,963	3,193,971	481,906	552,252	83.87	24,230,207
1939-1940 . . .	25,433,542	9,681,465	9,150,633	3,257,952	3,350,492	538,273	604,973	88.09	25,614,116
1940-1941 . . .	25,296,138	9,529,587	9,052,638	3,273,606	3,440,307	536,715	615,508	92.38	26,076,002
1941-1942 . . .	24,562,473	9,336,067	8,838,601	3,089,434	3,298,371	535,156	626,043	98.31	27,012,724
1942-1943 . . .	24,155,146	9,237,002	8,796,078	2,891,633	3,230,433	489,115	597,383	104.85	27,090,248

High-school and College Graduates, 1900 to 1942

(Public and private schools)

Year of graduation	High school			College		
	Men	Women	Total	Men	Women	Total
1900.....	38,075	56,808	94,883	17,220	8,104	25,324
1910.....	63,676	92,753	156,429	22,557	11,621	34,178
1920.....	123,684	187,582	311,266	31,980	16,642	48,622
1930.....	300,376	366,528	666,904	73,615	48,869	122,484
1940.....	578,718	642,757	1,221,475	109,546	76,954	186,500
1942.....	576,717	665,658	1,242,375	103,889	81,457	185,346

Total School Enrollments, 1919 to 1942

Type of school by level	1919-20	1929-30	1933-34	1939-40	1941-42
Kindergartens:					
Public.....	481,266	723,443	601,775	594,647	625,783
Private.....	29,683	54,456	37,506	57,341	57,341
Elementary:					
Public.....	18,897,661	20,555,150	20,228,014	18,286,906	17,588,723
Private.....	1,455,878	2,255,430	2,333,191	2,106,030	2,084,653
Total kindergarten and elementary schools.....	20,864,488	23,588,479	23,200,486	21,044,924	20,356,500
High Schools:					
Public.....	2,200,389	4,399,422	5,669,156	6,601,444	6,387,805
Private.....	213,920	341,158	360,092	457,768	483,195
Total high schools.....	2,414,309	4,740,580	6,029,248	7,059,212	6,871,000
Normal schools and teachers colleges.....	135,435	176,462	136,184	177,045	144,945
Colleges, univ., and prof. schools.....	462,445	924,275	919,176	1,317,158	1,259,045
Total higher education.....	597,880	1,100,737	1,055,360	1,494,203	1,403,990
Private comm. & bus. schools (day and eve.).....	335,161	179,756	102,286	634,546	488,112

Professional Schools, Including Teacher-Training Institutions, 1940 and 1942

Profession	1940				1942			
	Undergraduate		Graduate		Undergraduate		Graduate	
	Men	Women	Men	Women	Men	Women	Men	Women
Agriculture.....	28,987	443	2,511	74	26,124	490	1,855	64
Architecture.....	3,350	914	103	18	2,283	657	86	8
Commerce.....	89,678	19,324	4,091	703	78,438	22,735	3,148	615
Dentistry.....	7,480	152	120	5	8,412	166	110	.....
Education.....	80,275	140,299	14,411	14,034	54,653	119,975	9,443	10,773
Engineering.....	102,878	392	4,623	25	114,554	464	4,301	20
Fine arts.....	2,357	4,300	33	72	1,976	4,637	15	21
Forestry.....	3,917	.....	128	1	2,632	4	96	.....
Home economics.....	409	21,383	1	490	399	22,110	1	417
Journalism.....	1,755	1,142	146	94	1,398	1,043	75	37
Law.....	29,821	1,954	566	47	19,177	1,236	350	33
Library science.....	218	1,161	76	177	161	1,003	53	147
Medicine.....	21,831	1,424	2,139	204	22,615	1,443	1,780	182
Music.....	4,770	8,279	365	430	3,907	7,967	300	363
Nursing.....	4	9,434	.....	207	104	11,217	.....	190
Pharmacy.....	7,641	951	154	19	7,548	1,102	129	14
Theology.....	10,578	870	1,870	88	11,805	891	1,869	82
Veterinary medicine.....	2,577	15	72	2	2,541	29	71	2
Total.....	424,487	222,512	33,917	17,618	384,441	212,686	26,220	13,947

Sources (this page): U. S. Office of Education.

U. S. Public, Private School, and College Statistics, 1942

Source: U. S. Office of Education.

States	Public schools				Private and parochial		Colleges and universities	
	No. schools	Total enrollment	Avg. salary of teachers	Expenditures per pupil	No. schools	Total enrollment	No. colleges and universities	Total enrollment
Alabama.....	4,747	666,738	787	39.75	147	12,542	26	18,628
Arizona.....	543	116,430	1,653	104.66	45	4,084	5	5,316
Arkansas.....	4,791	441,106	678	38.59	77	7,085	21	9,179
California.....	4,724	1,225,850	2,351	166.92	516	87,744	100	114,075
Colorado.....	2,052	214,022	1,417	120.38	118	17,007	17	16,563
Connecticut.....	971	266,808	1,932	124.88	277	58,284	27	14,539
Delaware.....	227	42,505	1,741	113.80	36	6,908	4	1,116
D. C.....	127	96,520	2,329	137.48	78	16,914	22	22,714
Florida.....	2,379	369,036	1,130	68.08	107	10,929	14	11,384
Georgia.....	4,530	713,094	806	44.57	64	9,171	50	23,826
Idaho.....	1,271	118,821	1,115	86.72	40	3,027	8	5,656
Illinois.....	12,371	1,196,770	1,807	128.99	1,087	246,319	87	97,861
Indiana.....	3,562	669,148	1,505	95.97	357	57,677	39	34,156
Iowa.....	10,604	490,934	1,061	95.40	464	48,127	60	27,489
Kansas.....	7,782	362,812	1,021	86.27	270	24,588	44	23,200
Kentucky.....	6,739	575,107	936	51.38	267	39,765	38	19,561
Louisiana.....	2,965	461,835	1,086	65.93	282	61,374	18	23,467
Maine.....	2,126	158,061	1,000	69.72	118	29,028	15	5,625
Maryland.....	1,234	286,974	1,713	89.92	232	53,034	26	17,441
Massachusetts.....	2,334	656,974	2,049	130.73	606	161,007	64	54,645
Michigan.....	8,824	914,205	1,671	101.91	591	143,241	59	61,831
Minnesota.....	7,833	497,026	1,288	108.26	412	66,455	46	31,522
Mississippi.....	4,974	593,428	517	31.52	71	5,882	32	12,013
Missouri.....	9,904	694,779	1,223	86.79	516	78,342	55	37,046
Montana.....	2,055	102,906	1,224	125.59	51	7,579	11	6,191
Nebraska.....	7,155	257,194	854	85.12	301	18,916	22	14,168
Nevada.....	285	23,993	1,644	134.37	1	273	1	1,072
New Hampshire.....	1,701	72,515	1,293	100.70	105	24,525	9	5,966
New Jersey.....	2,783	678,628	2,157	158.08	493	122,123	32	21,692
New Mexico.....	919	131,347	1,190	83.43	84	14,099	7	4,219
New York.....	10,106	2,126,193	2,618	168.07	1,450	406,313	106	183,166
North Carolina.....	4,569	871,765	1,019	45.11	80	5,284	54	32,079
North Dakota.....	4,168	133,203	750	79.65	74	10,855	12	7,032
Ohio.....	5,414	1,164,160	1,747	106.13	735	155,457	64	81,674
Oklahoma.....	4,243	510,264	1,120	72.83	112	10,821	39	27,466
Oregon.....	1,868	189,466	1,430	106.97	103	10,938	20	15,230
Pennsylvania.....	10,304	1,734,842	1,724	106.90	1,131	297,515	99	78,297
Rhode Island.....	401	105,946	1,830	122.99	105	32,228	8	5,818
South Carolina.....	4,083	475,210	820	45.51	38	4,851	33	16,696
South Dakota.....	4,704	129,680	844	96.33	67	7,671	16	6,206
Tennessee.....	5,918	635,736	880	50.44	105	13,075	48	23,430
Texas.....	9,240	1,303,323	1,091	78.24	438	52,145	86	72,315
Utah.....	533	134,632	1,454	84.76	16	1,487	11	11,042
Vermont.....	1,128	60,511	1,001	93.84	46	11,069	11	3,898
Virginia.....	4,228	556,377	1,047	55.83	118	14,448	41	25,881
Washington.....	1,784	343,121	1,920	127.70	158	19,341	23	22,624
West Virginia.....	5,103	443,337	1,265	72.63	66	9,011	20	12,935
Wisconsin.....	6,640	493,430	1,428	109.69	631	116,556	66	28,940
Wyoming.....	1,259	55,711	1,145	120.29	10	1,415	1	2,001
Total.....	208,235	24,562,473	1,507	98.31	13,296	2,616,529	1,720	1,403,990
Territories								
Alaska.....	99	7,502	1,938	157.54	*	*	1	248
Canal Zone.....	20	7,120	1,745	118.51	*	*	1	175
Hawaii.....	186	80,038	2,045	*	*	*	1	2,368
Puerto Rico.....	1,860	292,758	899	31.69	*	*	2	4,729
Virgin Islands.....	22	3,614	900	45.75	*	*	*	*

*Data not available.

(Latest figures available from U. S. Office of Education)

Teachers and Enrollment in Private Schools by Religious Affiliation, 1940-1941

Religious affiliation or control	Number of schools	Teachers			Enrollment		
		Men	Women	Total	Male	Female	Total
Elementary Schools							
Baptist.....	18	6	30	36	476	457	933
Brethren.....	2	1	4	5	75	52	127
Church of Christ, Scientist.....	8	3	26	29	156	228	384
Congregational.....	10	6	37	43	444	510	954
Friends.....	25	20	159	179	1,574	1,466	3,040
Jewish.....	4	26	16	42	982	27	1,009
Lutheran.....	890	1,107	312	1,419	28,248	26,564	54,812
Methodist.....	26	8	47	55	608	874	1,482
Presbyterian.....	26	19	72	91	1,026	1,079	2,105
Protestant Episcopal.....	100	99	184	283	2,873	2,317	5,190
Reformed.....	6	4	11	15	406	97	503
Roman Catholic*.....	7,944	1,183	58,898	60,081	1,108,694	1,016,488	2,035,182
Seventh-day Adventist.....	62	12	84	96	1,595	1,484	3,079
Other denominations.....	43	17	81	98	1,125	1,200	2,325
Nonsectarian.....	566	536	1,839	2,375	20,970	21,184	42,154
Total.....	9,730	3,047	61,800	64,847	1,079,252	1,074,027	2,153,279
Secondary Schools							
Baptist.....	24	154	91	245	1,754	1,309	3,063
Brethren.....	4	8	13	21	106	128	234
Church of Christ, Scientist.....	8	17	18	35	108	61	169
Church of the Nazarene.....	2	8	6	14	132	151	283
Congregational.....	9	28	53	81	592	674	1,266
Friends.....	19	140	138	278	1,284	1,212	2,496
Lutheran.....	25	102	42	144	1,322	1,040	2,362
Mennonite.....	2	8	4	12	74	83	157
Methodist.....	28	132	148	280	1,481	1,470	2,951
Moravian.....	2	6	23	29	48	135	183
Pilgrim Holiness.....	2	...	12	12	87	90	177
Presbyterian.....	27	90	122	212	1,672	1,560	3,232
Protestant Episcopal.....	101	591	453	1,044	5,498	3,025	8,523
Reformed.....	8	102	20	122	1,681	296	1,977
Roman Catholic.....	2,105	6,536	14,440	20,976	157,583	203,540	361,123
Seventh-day Adventist.....	70	213	181	394	2,212	2,500	4,712
Unitarian.....	2	5	9	14	87	...	87
Other denominations.....	23	181	141	322	1,708	1,511	3,219
Nonsectarian.....	536	3,226	2,669	5,895	37,034	24,520	61,554
Total.....	2,997	11,547	18,583	30,130	214,463	243,305	457,768

*Sex distribution of teachers for Roman Catholic schools revised since originally published.

Public and Private Residential Schools for the Blind, Deaf, Mentally Deficient, and Delinquent, 1922 to 1940

Source: U. S. Office of Education.

Type and year	States reported*	Schools reported	Pupils	Type and year	States reported*	Schools reported	Pupils
Blind:				Deaf (con't.)			
1922.....	39	48	4,634	1936.....	45	79	15,366
1927.....	41	51	5,245	1940.....	45	79	14,673
1931.....	41	55	5,530				
1936.....	41	55	5,851	Mentally deficient:			
1940.....	40	50	5,870	1936.....	47	130	21,889†
				1940.....	46	104	21,806†
Deaf:				Delinquent:			
1922.....	43	75	11,417	1936.....	49	154	31,174
1927.....	44	76	13,928	1940.....	49	142	29,109
1931.....	45	83	14,854				

*Includes District of Columbia.

†Includes only children reported for school work.

Degrees Granted by Institutions of Higher Education, 1941-42

Source: U. S. Office of Education.

Field	Bachelor's		Master's	Doctor's
	Professional schools	Schools of arts and sciences		
Arts and sciences.....		61,248	10,474	2,339
Professions.....	98,819	23,172	13,839	1,158
Agriculture.....	4,858	205	543	156
Architecture.....	452		64	
Commerce.....	12,542	5,575	670	54
Dentistry.....	1,878	179 ¹	73	
Education.....	37,468	5,664	9,721	425
Engineering (all branches).....	14,847	674	1,043	129
Fine Arts.....	472	1,528	51	
Forestry.....	534		35	3
Home economics.....	4,092	2,932	173	4
Journalism.....	610	916	52	1
Law.....	5,733	685 ²	125	35
Library science.....	875	371	46	7
Medicine.....	5,601	2,320 ³	194	35
Music.....	1,405	1,797	553	6
Nursing.....	567	326	96	
Pharmacy.....	1,706		41	19
Veterinary medicine.....	547		4	1
Other.....	4,632		355	200
Total.....	98,819	84,420	24,313	3,414

¹Pre dentistry. ²Prelaw. ³Premedicine.

Number Surviving Through College per 1,000 Pupils

Grade or year	1925-1926	1926-1927	1927-1928	1928-1929	1929-1930	1930-1931	1931-1932	1932-1933	1933-1934	1934-1935
Elementary										
Fifth*.....	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
Sixth.....	911	919	928	939	954	943	929	935	944	953
Seventh.....	815	824	834	847	861	872	884	889	895	892
Eighth.....	745	754	779	805	825	824	818	831	836	842
High school										
I.....	642	677	714	736	760	770	780	786	792	802
II.....	509	552	588	624	647	652	651	664	688	712
III.....	421	453	485	498	512	529	546	570	594	590
IV.....	370	400	415	432	454	463	482	510	512	513
Graduates.....	316	333	355	378	403	417	432	457	462	467
Year of graduation.....	1933	1934	1935	1936	1937	1938	1939	1940	1941	1942
College										
I.....	112	129	135	137	139	146	.....	.....	.....	.....
Graduates.....	57	60	65	69	70	72	.....	.....	.....	.....
Year of graduation.....	1937	1938	1939	1940	1941	1942	.....	.....	.....	.....

*Fourth grade in 11-grade system; fifth grade in 12-grade system.

Increase in College Enrollment, 1899 to 1942

Year	Enrollment	Population 18-21	Number enrolled per 100 persons 18-21
1899-1900.....	237,592	5,930,765	4
1909-10.....	355,215	7,335,453	5
1919-20.....	597,857	7,343,794	8
1929-30.....	1,100,737	9,026,741	12
1939-40.....	1,494,203	9,753,537	15
1941-42.....	1,403,990	9,932,577	14

On January 11, 1807, was born Ezra Cornell. He became a lumberman. At the age of 35, he became interested in the project of building a telegraph line from Baltimore to Washington. He invented a machine for laying wires underground, but the thing had to be given up because of poor insulation, so at his suggestion the wires were strung on poles. He was instrumental in forming the Western Union Telegraph Company in 1853. He became rich, moved to Ithaca, N. Y., and in 1866, The Cornell University, thus named, was formally opened.—F. P. A.

Academic Degree Abbreviations

Source: American Council on Education.

Ae.E.	Aeronautical Engineer	G.Ph.	Graduate in Pharmacy
B.A.	Bachelor of Arts	HH.D.	Doctor of Humanities
B.Ag.	Bachelor of Agriculture	L.H.D.	Doctor of Humane Letters
B.App.Arts	Bachelor of Applied Arts	Litt.B.	Bachelor of Literature
B.Arch	Bachelor of Architecture	Litt.M.	Master of Letters
B.B.A.	Bachelor of Business Administration	LL.B.	Bachelor of Laws
B.B.S.	Bachelor of Business Science	LL.D.	Doctor of Laws
B.C.E.	Bachelor of Civil Engineering	LL.M.	Master of Laws
B.Ch.E.	Bachelor of Chemical Engineering	M.A.	Master of Arts
B.D.	Bachelor of Divinity	M.Aero.E.	Master of Aeronautical Engineering
B.Ed.	Bachelor of Education	M.B.	Bachelor of Medicine
B.E.E.	Bachelor of Electrical Engineering	M.C.E.	Master of Civil Engineering
B.F.A.	Bachelor of Fine Arts	M.C.S.	Master of Commercial Science
B.L.	Bachelor of Letters	M.D.	Doctor of Medicine
B.Litt.	Bachelor of Literature	M.E.	Mechanical Engineer
B.Mus.	Bachelor of Music or in Music	M.Ed.	Master of Education
B.N.	Bachelor of Nursing	Med.Sc.D.	Doctor of Medical Science
B.Pharm.	Bachelor of Pharmacy	M.Eng.	Mining Engineer
B.Ph.	Bachelor of Philosophy	M.F.	Master of Forestry
B.S.	Bachelor of Science	M.Int.Med.	Master of Internal Medicine
B.Th.	Bachelor of Theology	M.M.	Master of Music
C.E.	Civil Engineer	M.Mech.Eng.	Master of Mechanical Engineering
Ch.E.	Chemical Engineer	M.Mus.	Master of Music
D.C.E.	Doctor of Civil Engineering	M.N.	Master of Nursing
D.C.L.	Doctor of Civil Law	M.P.H.	Master of Public Health
D.C.S.	Doctor of Commercial Science	M.R.E.	Master of Religious Education
D.D.	Doctor of Divinity	M.R.P.	Master in Regional Planning
D.D.S.	Doctor of Dental Surgery	M.S.	Master of Science
D.Ed.	Doctor of Education	M.Soc.Wk.	Master of Social Work
D.M.L.	Doctor of Modern Languages	M.Surgery	Master in Surgery
D.M.S.	Doctor of Medical Science	M.Th.	Master of Theology
D.P.H.	Doctor of Public Health	Phar.D.	Doctor of Pharmacy
D.R.E.	Doctor of Religious Education	Ph.B.	Bachelor of Philosophy
D.Sc.	Doctor of Science	Ph.C.	Pharmaceutical Chemist
D.V.M.	Doctor of Veterinary Medicine	Ph.D.	Doctor of Philosophy
E.E.	Electrical Engineer	Ph.G.	Graduate in Pharmacy
E.M.	Engineer of Mines	Ph.L.	Licentiate in Philosophy
E.Met.	Engineer of Metallurgy	Ph.M.	Master of Philosophy
G.L.	Graduate in Law	S.D.	Doctor of Science
G.N.	Graduate Nurse	S.Sc.D.	Doctor of Social Science
		S.T.B.	Bachelor of Sacred Theology
		S.T.D.	Doctor of Sacred Theology
		S.T.M.	Master of Sacred Theology

Colors of Academic Degrees

Agriculture	Maize	Library Science	Lemon
Arts and Letters	White	Medicine	Green
Commerce & Accountancy	Drab	Music	Pink
Dentistry	Lilac	Oratory	Silver gray
Economics	Copper	Pharmacy	Olive green
Education	Light blue	Philosophy	Dark blue
Engineering	Orange	Physical Education	Sage green
Fine Arts, Architecture	Brown	Public Health	Salmon pink
Forestry	Russet	Science	Golden yellow
Humanities	Crimson	Theology	Scarlet
Law	Purple	Veterinary Science	Gray

Selected List of Accredited United States Colleges and Universities

M=Male; F=Female; C=Coeducational; Co=Coordinate.

Institution	Location	Founded	Chief Executive	Faculty	Students No. MFO	Vols. in Library	Control	Endowment
Adams State College	Alamosa, Colorado	1921	Ira Richardson	23	295 C	21,485	State	
Adelphi College	Garden City, New York	1866	Paul D. Edly	74	1,064 F	38,662	Priv.	\$ 42,671
Agnes Scott College	Dacula, Georgia	1889	James R. McCain	68	550 F	44,500	Priv.	2,450,000
Akron, University of	Akron, Ohio	1870	H. E. Simmons	101	2,096 C	69,582	City	134,634
Alabama, University of	University, Alabama	1831	Raymond R. Paty	300	4,950 C	300,000	State	5,950,000
Alabama College for Women	Montevallo, Alabama	1896	A. F. Harman	68	671 F	49,500	State	591,123
Alabama Polytechnic Institute	Auburn, Alabama	1872	Luther N. Duncan	230	5,500 C	106,000	State	
Alabama State Teachers College	Florence, Alabama	1872	J. A. Keller	40	585 C	50,000	State	
Alabama State Teachers College	Jacksonville, Alabama	1893	Houston Cole	18	659 C	30,000	State	
Alabama State Teachers College	Livingston, Alabama	1883	W. W. Hill	25	150 C	23,776	State	
Albertus Magnus College	New Haven, Connecticut	1887	C. B. Smith	23	510 C	30,000	State	
Albion College	Albion, Michigan	1835	Sister Mary Samuel Boyle	38	200 F	20,000	Cath.	5,841
Albright College	Reading, Pennsylvania	1856	Wm. W. Whitehouse	46	750 C	64,383	Meth.	2,524,714
Alcorn Agricultural and Mechanical College	Alcorn, Mississippi	1871	W. H. Pipes	30	299 C	25,000	State	962,496
Alfred University	Alfred, New York	1836	J. E. Walters	70	750 C	65,050	St.-Priv.	1,047,422
Allegheny College	Meadville, Pennsylvania	1815	J. R. Schurtz	50	800 C	158,988	Presb.	1,726,959
Alma College	Alma, Michigan	1886	Roy W. Hamilton	26	313 C	51,000	Presb.	650,000
Averno Teachers College	Milwaukee, Wisconsin	1936	Mother M. Corona	19	422 F	21,895	Cath.	
American International College	Springfield, Massachusetts	1885	Chester S. McGown	42	1,576 C	13,770	Priv.	917,654
American University	Washington, D. C.	1893	Paul F. Douglass	152	427 C	111,286	Meth.	12,427,103
Anherst College	Anherst, Massachusetts	1821	Stanley King	55	875 M	240,000	Priv.	2,000,000
Antioch College	Yellow Springs, Ohio	1853	A. D. Henderson	47	900 C	70,000	Priv.	71,192
Appalachian State Teachers College	Boone, North Carolina	1903	B. B. Dougherty	163	2,114 C	170,800	State	
Arizona, University of	Tucson, Arizona	1885	Alfred Atkinson	33	146 C	28,000	State	
Arizona State Teachers College	Flagstaff, Arizona	1899	Grady Gammage	65	933 C	50,000	State	
Arizona State Teachers College	Tempe, Arizona	1871	Arthur M. Harding	37	3,212 C	227,383	State	132,666
Arkansas, University of	Fayetteville, Arkansas	1909	Marvin Bankston	27	650 C	19,544	State	
Arkansas Agricultural and Mechanical College	Monticello, Arkansas	1910	H. E. Thompson	48	700 C	27,711	State	
Arkansas State College	Jonesboro, Arkansas	1907	Nolen M. Irby	30	829 C	29,000	Priv.	720,000
Arkansas State Teachers College	Conway, Arkansas	1890	Z. T. Johnson	28	189 C	21,000	Breth.	402,704
Asbury College	Wilmore, Kentucky	1878	Edward G. Mason	42	160 C	76,971	Priv.	4,036,968
Ashland College	Ashland, Ohio	1865	Rufus E. Clement	30	674 C	19,466	Luth.	449,918
Atlanta University	Atlanta, Georgia	1860	Lawrence M. Stavig	30	123 C	30,000	Luth.	1,500,000
Augustana College	Sioux Falls, South Dakota	1860	Conrad Bergendorf	54	2,150 C	90,000	Advent.	2,000,000
Augustana College and Theological Seminary	Rock Island, Illinois	1893	Theo. P. Stephens	25	359 C	68,000	Meth.	1,920,000
Aurora College	Aurora, Illinois	1858	Nelson P. Horn	62	958 C	43,910	Meth.	
Baker University	Baldwin City, Kansas	1845	Louis C. Wright	99	1,243 C	98,332	State	
Baldwin-Wallace College	Berea, Ohio	1918	John R. Emens	24	203 F	20,000	Cath.	
Bail State Teachers College	Muncie, Indiana	1904	Rev. Mother E. Regan	33	225 C	60,000	Priv.	276,759
Barat College of the Sacred Heart	Lake Forest, Illinois		Charles Harold Gray					
Bard College	Annandale-on-Hudson, New York	1860						

Barnard College.....	New York, New York.....	1869	Frank D. Fackenthal.....	115	1,173 F	63,499	Priv.....	4,920,000
Bates College.....	Lewiston, Maine.....	1864	Charles F. Phillips.....	44	702 C	80,000	Priv.....	2,220,928
Baylor University.....	Waco, Texas.....	1845	Pat M. Neff.....	77	2,638 C	107,000	Bapt.....	2,930,325
Beloit College.....	Beloit, Wisconsin.....	1846	Carey Cronels.....	46	750 C	133,000	Priv.....	2,400,000
Benedict College.....	Columbia, South Carolina.....	1870	J. A. Bacotts.....	22	601 C	16,577	Bapt.....	335,019
Bennett College.....	Greensboro, North Carolina.....	1873	David D. Jones.....	36	412 F	20,000	Meth.....	882,000
Bennington College.....	Bennington, Vermont.....	1932	Lewis Webster Jones.....	43	298 F	27,000	Priv.....	100,093
Berea College.....	Berea, Kentucky.....	1855	Francis S. Hutchins.....	70	1,200 C	100,000	Priv.....	11,123,640
Bethany College.....	Bethany, West Virginia.....	1840	W. H. Cramblet.....	35	419 C	40,000	Priv.....	2,948,899
Bethel College.....	Lindsborg, Kansas.....	1881	Emory Lindquist.....	29	300 C	23,391	Luth.....	434,472
Bethune-Cookman College.....	North Newton, Kansas.....	1887	Edmund G. Kaufman.....	23	162 C	23,500	Menon.....	571,372
Billings Polytechnic Institute.....	Daytona Beach, Florida.....	1904	James A. Colston.....	30	538 C	13,595	Priv.....	136,211
Birmingham-Southern College.....	Billings, Montana.....	1908	Ernest T. Eaton.....	35	400 C	30,000	Joint.....	578,828
Bishop College.....	Birmingham, Alabama.....	1856	George R. Stuart, Jr.....	38	1,000 C	50,000	Meth.....	13,845
Black Hills Teachers College.....	Marshall, Texas.....	1880	Joseph J. Rhoads.....	21	701 C	21,000	Bapt.....	501,000
Blue Mountain College.....	Spearfish, South Dakota.....	1883	Russell E. Jones.....	25	150 C	20,425	State.....	835,000
Blue Mountain, Mississippi.....	Blue Mountain, Mississippi.....	1873	Lawrence T. Lowrey.....	28	334 F	26,495	Cath.....	5,480,303
Boston College.....	Boston, Massachusetts.....	1863	Wm. H. J. Kennedy.....	31	252 F	198,422	Priv.....	8,844,996
Boston University.....	Chestnut Hill, Massachusetts.....	1863	Wm. L. Keleher.....	111	1,784 M	240,000	Cath.....	2,409,968
Bowdoin College.....	Boston, Massachusetts.....	1839	Daniel L. Marsh.....	610	17,119 C	240,000	Priv.....	514,853
Bowling Green State University.....	Brunswick, Maine.....	1794	K. C. M. Sills.....	45	547 M	203,258	Priv.....	250,000
Bradley Polytechnic Institute.....	Bowling Green, Ohio.....	1910	Frank J. Prout.....	95	2,077 C	65,000	State.....	1,513,481
Briar Cliff College.....	Peoria, Illinois.....	1897	Frederic R. Hamilton.....	67	1,378 C	64,300	Priv.....	11,675,340
Bridgewater College.....	Sioux City, Iowa.....	1930	Sister Jean Marie.....	22	326 F	15,000	Breth.....	7,391,483
Brigham Young University.....	Bridgewater, Virginia.....	1880	Paul H. Bowman.....	24	226 C	15,000	Mormon.....	1,300,000
Brooklyn College of the City of New York.....	Provo, Utah.....	1875	Howard S. McDonald.....	140	3,000 C	140,000	City.....	7,000,000
Brooklyn, Polytechnic Institute of.....	Brooklyn, New York.....	1875	Harry D. Gidsonse.....	419	11,650 C	155,211	Priv.....	3,000,000
Brown University.....	Providence, Rhode Island.....	1854	Harry S. Rogers.....	160	4,150 C	40,000	Priv.....	35,054,000
Bryn Mawr College.....	Bryn Mawr, Pennsylvania.....	1784	Henry M. Wriston.....	270	2,000 Co	206,124	Bapt.....	13,000,000
Bucknell University.....	Lewisburg, Pennsylvania.....	1885	Katherine E. McBride.....	94	602 F	85,732	Dis. of Ch.....	3,000,000
Buffalo University of.....	Buffalo, New York.....	1846	Herbert L. Spencer.....	96	1,611 C	100,000	State.....	35,054,000
Butler University.....	Indianapolis, Indiana.....	1846	Samuel P. Capen.....	340	5,691 C	3,964,316	Priv.....	13,000,000
California Institute of Technology.....	Berkeley, California.....	1855	M. O. Ross.....	77	2,500 C	35,000	Ch. Ref.....	250,000
Calvin College.....	Pasadena, California.....	1888	Robert G. Sproul.....	4864	26,891 C	39,000	Cath.....	634,415
Canisius College.....	Grand Rapids, Michigan.....	1891	James R. Page.....	160	1,000 M	42,500	Luth.....	3,575,416
Capital University.....	Buffalo, New York.....	1876	Henry Schultze.....	79	751 C	140,043	Priv.....	18,084,029
Carleton College.....	Columbus, Ohio.....	1870	Timothy J. Coughlin.....	36	615 C	45,500	Priv.....	500,000
Carnegie Institute of Technology.....	Northfield, Minnesota.....	1850	Otto Mees.....	47	1,593 M	39,000	Cath.....	500,000
Carroll College.....	Pittsburgh, Pennsylvania.....	1866	Laurence M. Gould.....	67	850 C	140,043	Priv.....	3,575,416
Carroll College.....	Helena, Montana.....	1900	Robert E. Doherty.....	189	2,300 C	45,500	Priv.....	18,084,029
Carson-Newman College.....	Waukesha, Wisconsin.....	1910	E. J. Riley.....	18	200 M	16,000	Cath.....	500,000
Carthage College.....	Jefferson City, Tennessee.....	1846	G. T. Vander Lugt.....	32	486 C	25,000	Presb.....	964,384
Case School of Applied Science.....	Carthage, Illinois.....	1851	James T. Warren.....	23	375 C	30,000	Bapt.....	725,000
Catawba College.....	Cleveland, Ohio.....	1870	Erland Nelson.....	24	274 C	32,000	Luth.....	820,000
Catholic University of America.....	Salisbury, North Carolina.....	1880	Wm. E. Wickenden.....	80	745 M	35,000	Priv.....	5,575,350
Catholic University of America.....	Washington, D. C.....	1851	Alvin R. Keppel.....	27	521 C	21,570	Evan.....	388,200
Cedar Crest College.....	Allentown, Pennsylvania.....	1887	Patrick J. McCormick.....	218	2,520 C	355,000	Cath.....	3,644,288
		1867	Dale H. Moore.....	34	330 F		Evan.....	

Selected List of Accredited United States Colleges and Universities—(cont.)

Institution	Location	Founded	Chief Executive	Faculty	Students No. MFG	Vols. in Library	Control	Endowment
Centenary College of Louisiana	Shreveport, Louisiana	1825	Joe J. Mickle	46	1,206 C	27,097	Meth.	\$ 467,649
Central College	Fayette, Missouri	1855	Harry S. DeVore	33	332 C	50,000	Meth.	1,107,763
Central College	Pella, Iowa	1853	Henry W. Pielenpol	28	238 C	20,000	Ref.	379,000
Central Michigan College of Education	Mt. Pleasant, Michigan	1892	C. L. Anspach	98	1,682 C	76,738	State	
Central Missouri State Teachers College	Warrensburg, Missouri	1871	George W. Diemer	60	516 C	69,783	State	
Central State College	Edmond, Oklahoma	1891	R. R. Robinson	44	1,303 C	32,179	State	
Central Washington College of Education	Ellensburg, Washington	1891	Robert E. McConnell	56	460 C	50,000	State	
Centre College of Kentucky	Danville, Kentucky	1819	Robert J. McMullen	23	400 C	39,100	Presb.	1,800,000
Charleston, College of	Charleston, South Carolina	1770	George D. Grice	16	293 C	31,325	City	522,000
Chattanooga, University of	Chattanooga, Tennessee	1886	David A. Lockmiller	64	1,723 C	105,000	Meth.	803,669
Chestnut Hill College	Chestnut Hill, Pennsylvania	1871	Sister Maria Koska	47	401 F	30,100	Cath.	
Cheyney Training School for Teachers	Cheyney, Pennsylvania	1837	Leslie Pinckney Hill	17	164 C	16,500	State	
Chicago, School of the Art Institute of	Chicago, Illinois	1869	Hubert Ropp	57	875 C	48,000	Priv.	
Chicago, University of	Chicago, Illinois	1891	Robert M. Hutchins	918	9,000 C	1,500,000	Priv.	70,856,444
Chicago Teachers College	Chicago, Illinois	1869	John A. Bartky	39	823 C	62,000	City	
Cincinnati, University of	Cincinnati, Ohio	1819	Raymond Walters	604	6,000 C	583,546	City	10,606,292
Citadel, The Military College of The	Charleston, South Carolina	1842	C. P. Summerrall	35	2,000 M	37,000	State	
Clark College	Atlanta, Georgia	1869	James P. Brawley	34	776 C	16,000	Meth.	676,475
Clark College	Dubuque, Iowa	1833	Sister Mary Ambrose	39	356 F	25,500	Cath.	
Clark University	Worcester, Massachusetts	1887	Wallace W. Atwood	39	527 C	174,000	Priv.	5,000,000
Clemson Agricultural College of South Carolina	Clemson, South Carolina	1883	Robert F. Poole	116	1,850 M	67,563	State	276,983
Coe College	Cedar Rapids, Iowa	1881	Byron S. Hollinshead	48	750 C	54,203	Priv.	1,816,680
Coker College	Hartsville, South Carolina	1908	Donald C. Agnew	34	339 F	20,000	Priv.	692,766
Colby College	Waterville, Maine	1813	J. S. Bixler	57	650 C	120,405	Priv.	3,000,000
Colgate University of	Hamilton, New York	1819	Everett N. Case	86	1,300 M	160,000	Priv.	5,693,543
Colorado, University of	Boulder, Colorado	1877	Robert L. Stearns	350	5,680 C	560,000	State	870,000
Colorado College	Colorado Springs, Colorado	1874	Thurston J. Davies	52	870 C	134,000	Priv.	2,453,000
Colorado Coll. of Agr. and Mech. Arts	Fort Collins, Colorado	1870	Roy M. Green	137	1,650 C	114,000	State	542,720
Colorado School of Mines	Golden, Colorado	1874	M. F. Coolbaugh	43	800 M	50,000	State	
Colorado State College of Education	Greeley, Colorado	1890	George W. Fraser	84	1,200 C	108,014	State	
Columbia College	Columbia, South Carolina	1854	J. Caldwell Guilds	32	414 F	15,400	Meth.	527,024
Columbia University	New York, New York	1754	Frank D. Fackenthal	1740	37,699 Co	2,000,000	Priv.	88,265,934
Concord College	Athens, West Virginia	1875	Virgil H. Stewart	30	482 C	20,350	State	
Concordia College	Moorehead, Minnesota	1891	J. N. Brown	41	635 C	30,083	Luth.	573,510
Connecticut, University of	Storrs, Connecticut	1881	Albert N. Jorgensen	222	3,355 C	95,000	State	307,295
Connecticut College for Women	New London, Conn.	1911	Katherine Blunt	93	755 F	108,651	Priv.	2,128,098
Connecticut Teachers College	New Britain, Conn.	1849	Herbert D. Wette	41	531 C	25,426	State	
Converse College	Spartanburg, South Carolina	1889	Edw. M. Gwathmey	40	425 C	33,500	Priv.	600,000
Cooper Union School of Engineering	New York, New York	1859	Edwin S. Burdell	85	675 C	115,000	Priv.	9,618,470
Cornell College	Mount Vernon, Iowa	1853	Russell D. Cole	55	625 C	60,000	Meth.	2,447,834
Cornell University	Ithaca, New York	1865	Edmund E. Day	1127	7,411 C	1,187,734	Priv.	34,903,861
Creighton University	Omaha, Nebraska	1879	Thomas S. Bowdern	219	2,620 C	129,175	Cath.	2,500,000
Culver-Stockton College	Canton, Missouri	1853	W. H. McDonald	25	210 C	30,000	Dis. of Ch.	850,000
Dakota Wesleyan University	Mitchell, South Dakota	1885	Joseph H. Edge	22	180 C	30,000	Meth.	590,000

Barnmouth College.....	1769	John S. Dickey.....	255	2,500 M	595,084	Priv.....	22,208,455
Davidson College.....	1837	John R. Cunningham.....	27	800 M	47,000	Presb.....	4,200,000
Dayton, University of.....	1850	George J. Renneker.....	80	1,750 C	42,000	City.....	4,338,334
Delaware, University of.....	1833	W. O. Sypher.....	91	859 C	104,000	State.....	3,468,936
Delta State Teachers College.....	1924	William M. Kethley.....	34	264 C	20,000	State.....	2,100,000
Denson University.....	1931	Kenneth I. Brown.....	60	899 C	108,000	Bapt.....	6,009,104
Denver, University of.....	1864	Ben Mark Cherrington.....	337	5,605 C	189,000	State.....	1,693,000
DePaul University.....	1898	Comerford J. O'Malley.....	226	7,904 C	76,955	Cath.....	2,000,000
DePauw University.....	1837	Clyde E. Wildman.....	88	1,343 C	105,740	Meth.....	6,009,104
Detroit, University of.....	1877	William J. Millor.....	203	4,811 C	126,000	Cath.....	1,693,000
Dickinson College.....	1773	William Prettyman.....	29	600 C	74,187	Priv.....	3,000,000
Dillard University.....	1930	A. W. Dent.....	22	397 C	28,250	Episc.....	1,225,030
Doane College.....	1872	Bryant Drake.....	80	2,800 C	111,511	Priv.....	1,440,479
Drake University.....	1881	Henry G. Harmon.....	20	475 C	194,000	Meth.....	2,953,218
Drexel University.....	1867	Alto Ayres Brown.....	44	475 C	194,000	Meth.....	998,105
Drexel Institute of Technology.....	1891	James Creese.....	209	2,550 C	85,529	Priv.....	730,534
Drury College.....	1873	J. F. Findlay.....	34	416 C	62,685	Cong.....	47,001,343
Dubuque, University of.....	1882	Dale D. Welch.....	40	300 C	27,588	Presb.....	2,000,000
Duchesne College.....	1882	Mother Helen Casey.....	20	164 F	18,000	Priv.....	1,438,445
Duke University.....	1838	Robert Lee Flowers.....	511	3,906 C	722,613	Priv.....	2,000,000
Durham, North Carolina.....	1935	Sister Mary Frederick.....	25	214 F	17,500	Cath.....	1,438,445
Duquesne University.....	1878	Raymond V. Kirk.....	148	2,216 C	48,188	Cath.....	2,000,000
D'Youville College.....	1908	Sister Grace.....	31	360 F	24,300	Cath.....	1,438,445
Earlham College.....	1847	Wm. C. Dennis.....	36	500 C	69,000	Friends.....	2,000,000
East Carolina Teachers College.....	1907	Howard J. McGinnis.....	59	1,049 C	54,680	State.....	2,000,000
East Central State College.....	1909	A. Linscheid.....	62	700 C	48,356	State.....	2,000,000
Eastern Illinois State Teachers College.....	1895	Robert G. Buzzard.....	76	405 C	70,445	State.....	2,000,000
Eastern Kentucky State Teachers College.....	1906	W. F. O'Donnell.....	65	758 C	63,639	State.....	2,000,000
Eastern Oregon College of Education.....	1929	La Grande, Oregon.....	26	318 C	25,829	State.....	2,000,000
Eastern Washington College of Education.....	1890	Cheney, Washington.....	50	350 C	61,000	State.....	2,000,000
East Tennessee State College.....	1911	Johnson City, Tennessee.....	48	615 C	82,000	State.....	2,000,000
East Texas State Teachers College.....	1889	Commerce, Texas.....	101	725 C	40,895	State.....	2,000,000
Elmhurst College.....	1871	Sam H. Whitley.....	27	400 C	40,895	State.....	2,000,000
Elmira College.....	1855	Timothy Lehmann.....	47	341 F	56,263	Priv.....	2,000,000
Emmanuel College.....	1919	William S. A. Pott.....	70	725 F	26,000	Cath.....	2,000,000
Emmanuel Missionary College.....	1874	Sister Teresa Patricia.....	49	731 C	32,000	Advent.....	2,000,000
Emory and Henry College.....	1836	A. W. Johnson.....	45	793 C	22,844	Priv.....	2,000,000
Emory University.....	1836	Foye G. Gibson.....	15	381 C	24,390	Meth.....	2,000,000
Erskine College.....	1836	Goodrich C. White.....	418	1,513 C	250,000	Meth.....	2,000,000
Evansville College.....	1839	Robert C. Grier.....	21	192 C	30,000	Presb.....	2,000,000
Fairmont State College.....	1854	Lincoln B. Hale.....	45	793 C	22,844	Priv.....	2,000,000
Fayetteville State Teachers College.....	1867	Joseph Rosier.....	41	430 C	26,500	State.....	2,000,000
Fenn College.....	1867	J. W. Seabrook.....	25	608 C	20,000	State.....	2,000,000
Findlay College.....	1881	Cecil V. Thomas.....	145	737 C	25,000	Priv.....	2,000,000
Fisk University.....	1882	C. A. Morey.....	15	97 C	20,000	Ch. of God.....	2,000,000
Florida, University of.....	1866	Charles S. Johnson.....	72	809 C	80,553	Priv.....	2,000,000
Florida Agr. and Mechanical Coll. for Negroes.....	1853	John J. Tigert.....	194	3,000 M	250,000	State.....	2,000,000
Florida Agr. and Mechanical Coll. for Negroes.....	1887	Wm. H. Gray, Jr.....	138	1,092 C	16,350	State.....	2,000,000

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Institution	Location	Founded	Chief Executive	Fac- ulty	Students No. MFO	Vols. in library	Control	Endowment
Florida Southern College	Lakeland, Florida	1885	Ludd M. Spivey	55	1,133 C	35,000	Meth.	\$ 1,000,000
Florida State College for Women	Tallahassee, Florida	1905	Dak S. Campbell	190	2,582 C	106,836	State	206,000
Fordham University	New York, New York	1841	Robert I. Gannon	227	7,500 M	220,544	Cath.	744,700
Fort Hays Kansas State College	Hays, Kansas	1901	Lyman D. Wooster	61	550 C	55,000	State	
Fort Valley State College	Fort Valley, Georgia	1895	C. V. Troup	34	374	12,000	State	
Franklin and Marshall College	Lancaster, Pennsylvania	1787	Theodore A. Distler	35	1,000 M	100,400	Reg.	1,501,650
Franklin College	Franklin, Indiana	1834	William G. Spencer	80	267 C	39,894	Bapt.	1,128,209
Fresno State College	Fresno, California	1911	Frank W. Thomas	32	1,257 C	61,261	State	
Furman University	Greenville, South Carolina	1826	John L. Pyle	48	1,299 C	55,000	Bapt.	834,356
Geneva College	Beaver Falls, Pennsylvania	1848	M. M. Pearce	32	1,100 C	37,697	Presb.	666,450
George Peabody College for Teachers	Nashville, Tennessee	1875	Henry H. Hill	82	1,200 C	454,626	Priv.	5,228,967
George Pepperdine College	Los Angeles, California	1937	Hugh M. Tiner	52	689 C	24,000	Priv.	1,090,000
Georgetown College	Georgetown, Kentucky	1829	Samuel S. Hill	36	422 C	17,000	Bapt.	600,000
Georgetown University	Georgetown, D. C.	1789	Lawrence C. Gorman	350	2,200 C	200,000	Cath.	3,447,650
George Washington University	Washington, D. C.	1821	Cloyd H. Marvin	387	8,200 C	160,000	Priv.	2,484,738
George Williams College	Chicago, Illinois	1890	Harold C. Colfman	24	349 C	22,500	Priv.	224,023
Georgia, University of	Atlanta, Georgia	1801	Harmon W. Caldwell	190	2,550 C	200,000	State	1,200,000
Georgia School of Technology	Atlanta, Georgia	1885	Blake R. Van Leer	190	3,124 M	73,000	State	1,000,000
Georgia State College	Industrial College, Georgia	1891	Benjamin F. Hubert	40	404 C	12,000	State	
Georgia State College for Women	Milledgeville, Georgia	1889	Guy H. Wells	103	1,200 F	36,000	State	
Georgia State Woman's College	Valdosta, Georgia	1906	Frank R. Reade	26	347 F	21,673	State	
Georgia Teachers College	Collegeboro, Georgia	1923	M. S. Pittman	32	393 C	35,000	State	
Georgetown College	Lakewood, New Jersey	1852	Mother Mary J. Constance	32	235 F		Cath.	
Geddyburg College	Geddyburg, Pennsylvania	1832	Henry W. A. Hanson	32	800 C	52,000	Luth.	1,000,000
Glenville State College	Glenville, West Virginia	1875	D. L. Haught	16	376 C	20,000	State	
Gonzaga University	Spokane, Washington	1887	Francis E. Corkery	61	1,001 M	50,000	Cath.	1,502,342
Good Counsel College	White Plains, New York	1923	Mother M. Aloysis	37	277 F	14,659	Cath.	
Goshen College	Goshen, Indiana	1895	Ernest E. Miller	28	301 C	29,139	Menon.	185,653
Goucher College	Baltimore, Maryland	1885	David A. Robertson	70	619 F	82,016	Priv.	2,130,695
Great Falls College of	Great Falls, Montana	1932	J. J. Donovan	45	515 C	32,000	Cath.	
Greensboro College	Greensboro, North Carolina	1838	Luther L. Gobel	39	369 F	26,627	Meth.	566,940
Grinnell College	Grinnell, Iowa	1846	Samuel N. Stevens	64	640 C	116,000	Priv.	2,514,966
Grove City College	Grove City, Pennsylvania	1876	Wair C. Kelter	41	725 C	42,000	Priv.	847,361
Guilford College	Guilford College, North Carolina	1837	Clyde A. Milner	27	395 C	28,000	Friends	668,650
Gustavus Adolphus College	St. Peter, Minnesota	1862	Edgar Carlson	34	541 C	23,386	Luth.	560,436
Hamilton College	Clinton, New York	1812	David Worcester	25	430 M	206,939	Priv.	3,934,343
Hamline University	St. Paul, Minnesota	1854	Charles N. Pace	48	950 C	46,100	Meth.	4,038,684
Hamden-Sydney College	Hamden-Sydney Virginia	1776	E. G. Gammon	12	350 M	34,000	Presb.	388,885
Hampton Institute	Hampton, Virginia	1868	Ralph P. Bridgman	108	1,071 C	72,109	Priv.	9,741,196
Hanover College	Hanover, Indiana	1827	Albert G. Parker, Jr.	17	207 C	43,000	Presb.	1,000,000
Hardin-Simmons University	Abilene, Texas	1891	Rupert N. Richardson	48	1,280 C	35,000	Bapt.	1,256,188
Harris Teachers College	St. Louis, Missouri	1905	Charles H. Philpott	35	644 C	24,323	City	
Harvard University	Cambridge, Massachusetts	1638	James B. Conant	1740	6,826 M	4,702,292	Priv.	156,079,411
Hastings College	Hastings, Nebraska	1882	Wm. M. French	35	380 C	34,000	Presb.	700,000

1833	1850	1867	1883	1899	1915	1931	1947	1963	1979	1995	2011	2027	2043	2059	2075	2091	2107	2123	2139	2155	2171	2187	2203	2219	2235	2251	2267	2283	2299	2315	2331	2347	2363	2379	2395	2411	2427	2443	2459	2475	2491	2507	2523	2539	2555	2571	2587	2603	2619	2635	2651	2667	2683	2699	2715	2731	2747	2763	2779	2795	2811	2827	2843	2859	2875	2891	2907	2923	2939	2955	2971	2987	3003	3019	3035	3051	3067	3083	3099	3115	3131	3147	3163	3179	3195	3211	3227	3243	3259	3275	3291	3307	3323	3339	3355	3371	3387	3403	3419	3435	3451	3467	3483	3499	3515	3531	3547	3563	3579	3595	3611	3627	3643	3659	3675	3691	3707	3723	3739	3755	3771	3787	3803	3819	3835	3851	3867	3883	3899	3915	3931	3947	3963	3979	3995	4011	4027	4043	4059	4075	4091	4107	4123	4139	4155	4171	4187	4203	4219	4235	4251	4267	4283	4299	4315	4331	4347	4363	4379	4395	4411	4427	4443	4459	4475	4491	4507	4523	4539	4555	4571	4587	4603	4619	4635	4651	4667	4683	4699	4715	4731	4747	4763	4779	4795	4811	4827	4843	4859	4875	4891	4907	4923	4939	4955	4971	4987	5003	5019	5035	5051	5067	5083	5099	5115	5131	5147	5163	5179	5195	5211	5227	5243	5259	5275	5291	5307	5323	5339	5355	5371	5387	5403	5419	5435	5451	5467	5483	5499	5515	5531	5547	5563	5579	5595	5611	5627	5643	5659	5675	5691	5707	5723	5739	5755	5771	5787	5803	5819	5835	5851	5867	5883	5899	5915	5931	5947	5963	5979	5995	6011	6027	6043	6059	6075	6091	6107	6123	6139	6155	6171	6187	6203	6219	6235	6251	6267	6283	6299	6315	6331	6347	6363	6379	6395	6411	6427	6443	6459	6475	6491	6507	6523	6539	6555	6571	6587	6603	6619	6635	6651	6667	6683	6699	6715	6731	6747	6763	6779	6795	6811	6827	6843	6859	6875	6891	6907	6923	6939	6955	6971	6987	7003	7019	7035	7051	7067	7083	7099	7115	7131	7147	7163	7179	7195	7211	7227	7243	7259	7275	7291	7307	7323	7339	7355	7371	7387	7403	7419	7435	7451	7467	7483	7499	7515	7531	7547	7563	7579	7595	7611	7627	7643	7659	7675	7691	7707	7723	7739	7755	7771	7787	7803	7819	7835	7851	7867	7883	7899	7915	7931	7947	7963	7979	7995	8011	8027	8043	8059	8075	8091	8107	8123	8139	8155	8171	8187	8203	8219	8235	8251	8267	8283	8299	8315	8331	8347	8363	8379	8395	8411	8427	8443	8459	8475	8491	8507	8523	8539	8555	8571	8587	8603	8619	8635	8651	8667	8683	8699	8715	8731	8747	8763	8779	8795	8811	8827	8843	8859	8875	8891	8907	8923	8939	8955	8971	8987	9003	9019	9035	9051	9067	9083	9099	9115	9131	9147	9163	9179	9195	9211	9227	9243	9259	9275	9291	9307	9323	9339	9355	9371	9387	9403	9419	9435	9451	9467	9483	9499	9515	9531	9547	9563	9579	9595	9611	9627	9643	9659	9675	9691	9707	9723	9739	9755	9771	9787	9803	9819	9835	9851	9867	9883	9899	9915	9931	9947	9963	9979	9995	10011	10027	10043	10059	10075	10091	10107	10123	10139	10155	10171	10187	10203	10219	10235	10251	10267	10283	10299	10315	10331	10347	10363	10379	10395	10411	10427	10443	10459	10475	10491	10507	10523	10539	10555	10571	10587	10603	10619	10635	10651	10667	10683	10699	10715	10731	10747	10763	10779	10795	10811	10827	10843	10859	10875	10891	10907	10923	10939	10955	10971	10987	11003	11019	11035	11051	11067	11083	11099	11115	11131	11147	11163	11179	11195	11211	11227	11243	11259	11275	11291	11307	11323	11339	11355	11371	11387	11403	11419	11435	11451	11467	11483	11499	11515	11531	11547	11563	11579	11595	11611	11627	11643	11659	11675	11691	11707	11723	11739	11755	11771	11787	11803	11819	11835	11851	11867	11883	11899	11915	11931	11947	11963	11979	11995	12011	12027	12043	12059	12075	12091	12107	12123	12139	12155	12171	12187	12203	12219	12235	12251	12267	12283	12299	12315	12331	12347	12363	12379	12395	12411	12427	12443	12459	12475	12491	12507	12523	12539	12555	12571	12587	12603	12619	12635	12651	12667	12683	12699	12715	12731	12747	12763	12779	12795	12811	12827	12843	12859	12875	12891	12907	12923	12939	12955	12971	12987	12999	13015	13031	13047	13063	13079	13095	13111	13127	13143	13159	13175	13191	13207	13223	13239	13255	13271	13287	13303	13319	13335	13351	13367	13383	13399	13415	13431	13447	13463	13479	13495	13511	13527	13543	13559	13575	13591	13607	13623	13639	13655	13671	13687	13703	13719	13735	13751	13767	13783	13799	13815	13831	13847	13863	13879	13895	13911	13927	13943	13959	13975	13991	14007	14023	14039	14055	14071	14087	14103	14119	14135	14151	14167	14183	14199	14215	14231	14247	14263	14279	14295	14311	14327	14343	14359	14375	14391	14407	14423	14439	14455	14471	14487	14503	14519	14535	14551	14567	14583	14599	14615	14631	14647	14663	14679	14695	14711	14727	14743	14759	14775	14791	14807	14823	14839	14855	14871	14887	14903	14919	14935	14951	14967	14983	14999	15015	15031	15047	15063	15079	15095	15111	15127	15143	15159	15175	15191	15207	15223	15239	15255	15271	15287	15303	15319	15335	15351	15367	15383	15399	15415	15431	15447	15463	15479	15495	15511	15527	15543	15559	15575	15591	15607	15623	15639	15655	15671	15687	15703	15719	15735	15751	15767	15783	15799	15815	15831	15847	15863	15879	15895	15911	15927	15943	15959	15975	15991	16007	16023	16039	16055	16071	16087	16103	16119	16135	16151	16167	16183	16199	16215	16231	16247	16263	16279	16295	16311	16327	16343	16359	16375	16391	16407	16423	16439	16455	16471	16487	16503	16519	16535	16551	16567	16583	16599	16615	16631	16647	16663	16679	16695	16711	16727	16743	16759	16775	16791	16807	16823	16839	16855	16871	16887	16903	16919	16935	16951	16967	16983	16999	17015	17031	17047	17063	17079	17095	17111	17127	17143	17159	17175	17191	17207	17223	17239	17255	17271	17287	17303	17319	17335	17351	17367	17383	17399	17415	17431	17447	17463	17479	17495	17511	17527	17543	17559	17575	17591	17607	17623	17639	17655	17671	17687	17703	17719	17735	17751	17767	17783	17799	17815	17831	17847	17863	17879	17895	17911	17927	17943	17959	17975	17991	18007	18023	18039	18055	18071	18087	18103	18119	18135	18151	18167	18183	18199	18215	18231	18247	18263	18279	18295	18311	18327	18343	18359	18375	18391	18407	18423	18439	18455	18471	18487	18503	18519	18535	18551	18567	18583	18599	18615	18631	18647	18663	18679	18695	18711	18727	18743	18759	18775	18791	18807	18823	18839	18855	18871	18887	18903	18919	18935	18951	18967	18983	18999	19015	19031	19047	19063	19079	19095	19111	19127	19143	19159	19175	19191	19207	19223	19239	19255	19271	19287	19303	19319	19335	19351	19367	19383	19399	19415	19431	19447	19463	19479	19495	19511	19527	19543	19559	19575	19591	19607	19623	19639	19655	19671	19687	19703	19719	19735	19751	19767	19783	19799	19815	19831	19847	19863	19879	19895	19911	19927	19943	19959	19975	19991	20007	20023	20039	20055	20071	20087	20103	20119	20135	20151	20167	20183	20199	20215	20231	20247	20263	20279	20295	20311	20327	20343	20359	20375	20391	20407	20423	20439	20455	20471	20487	20503	20519	20535	20551	20567	20583	20599	20615	20631	20647	20663	20679	20695	20711	20727	20743	20759	20775	20791	20807	20823	20839	20855	20871	20887	20903	20919	20935	20951	20967	20983	20999	21015	21031	21047	21063	21079	21095	21111	21127	21143	21159	21175	21191	21207	21223	21239	21255	21271	21287	21303	21319	21335	21351	21367	21383	21399	21415	21431	21447	21463	21479	21495	21511	21527	21543	21559	21575	21591	21607	21623	21639	21655	21671	21687	21703	21719	21735	21751	21767	21783	21799	21815	21831	21847	21863	21879	21895	21911	21927	21943	21959	21975	21991	22007	22023	22039	22055	22071	22087	22103	22119	22135	22151	22167	22183	22199	22215	22231	22247	22263	2227
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Selected List of Accredited United States Colleges and Universities—(cont.)

Institution	Location	Founded	Chief Executive	Faculty	Students No. MFC	Vols. in library	Control	Endowment \$
Kansas City, University of	Kansas City, Missouri	1929	Clarence R. Decker	175	3,000 C	133,055	Priv.	1,088
Kansas State Coll. of Agr. and Applied Science	Manhattan, Kansas	1863	Milton S. Eisenhower	325	3,886 C	146,000	State	517,956
Kansas State Teachers College	Emporia, Kansas	1863	James F. Price	83	722 C	83,000	State	722 C
Kansas State Teachers College	Pittsburg, Kansas	1903	Rees H. Hughes	110	1,767 C	88,873	State	256,000
Keene Teachers College	Keene, New Hampshire	1909	L. P. Young	24	250 C	14,500	State	
Kent State University	Kent, Ohio	1910	George A. Bowman	94	2,155 C	78,000	State	
Kentucky, University of	Lexington, Kentucky	1865	Herman L. Donovan	277	4,300 C	367,151	State	189,259
Kentucky State College for Negroes	Frankfort, Kentucky	1886	Rutus B. Atwood	28	475 C	17,000	State	
Kenyon College	Gambier, Ohio	1824	Gordon K. Chalmers	35	278 M	77,500	Priv.	1,910,708
Keuka College	Keuka Park, New York	1890	Henry E. Allen	31	369 F	32,868	Bapt.	375,000
Knox College	Galesburg, Illinois	1837	Carter Davidson	57	640 C	70,000	Priv.	2,700,000
Knoxville College	Knoxville, Tennessee	1875	Wm. Lloyd Limes	24	258 C	13,000	Presb.	500,000
Lafayette College	Easton, Pennsylvania	1832	Ralph C. Hutchison	59	1,000 M	112,557	Presb.	4,130,244
Lake Erie College	Painesville, Ohio	1859	Helen D. Bragdon	27	152 F	34,332	Priv.	815,493
Lake Forest College	Lake Forest, Illinois	1857	Ernest A. Johnson	25	312 C	54,963	Presb.	1,355,100
Lane College	Jackson, Tennessee	1882	Dean S. Yarbrough	18	515 C	10,600	Episc.	30,000
LaSalle College	Philadelphia, Pennsylvania	1863	Brother Emilian	20	136 M	17,960	Cath.	
Lawrence College	Appleton, Wisconsin	1847	Nathan M. Pusey	59	750 C	73,000	Priv.	1,500,000
Lebanon Valley College	Annapolis, Pennsylvania	1866	Clyde A. Lynch	27	400 C	31,240	Breth.	1,000,000
Lehigh University	Bethlehem, Pennsylvania	1865	E. K. Smiley	117	1,471 M	258,000	Priv.	7,287,000
LeMoyne College	Memphis, Tennessee	1870	Hollis F. Price	17	282 C	15,000	Am. Miss.	3,000
Lenoir Rhyme College	Hickory, North Carolina	1891	P. E. Monroe	27	614 C	25,000	Luth.	679,321
Lewis and Clark College	Portland, Oregon	1867	Morgan S. Odell	31	248 C	18,000	Presb.	300,000
Lewiston State Normal School	Lewiston, Idaho	1867	Glenn W. Todd	24	300 C			
Limestone College	Gaffney, South Carolina	1845	R. C. Granberry	34	360 F	21,411	State	
Lincoln Memorial University	Harragate, Tennessee	1897	S. W. McClelland	24	300 C	30,000	Priv.	516,987
Lincoln University	Lincoln University, Pennsylvania	1854	Horace Mann Bond	28	275 M	38,000	Priv.	722,526
Lincoln University of Missouri	Jefferson City, Missouri	1866	Sherman D. Scruggs	57	840 C	47,000	State	1,049,006
Lindenwood College	St. Charles, Missouri	1827	Harry M. Gage	51	512 F	37,000	Presb.	2,477,186
Lindfield College	McMinnville, Oregon	1857	Harry L. Dillin	29	400 C	30,000	Bapt.	1,125,000
Livingstone College	Salisbury, North Carolina	1879	William J. Trent	22	401 C	20,103	A. M. E.	46,500
Long Island University	Brooklyn, New York	1926	Tristram W. Metcalfe	100	1,367 C	97,000	Cath.	1,400,000
Loras College	Dubuque, Iowa	1839	M. J. Martin	70	344 M	17,000	Cath.	
Loretto Heights College	Loretto, Colorado	1891	Paul J. Ketrick	37	303 F	17,000	Cath.	
Louisiana College	Pineville, Louisiana	1906	Edgar Godbold	26	667 C	13,705	Bapt.	319,000
Louisiana Polytechnic Institute	Ruston, Louisiana	1894	Claybrook Cottingham	100	1,938 C	34,025	State	
Louisiana State University and A and M College	Baton Rouge, Louisiana	1860	W. B. Hatcher	416	7,351 C	356,253	State	14,644
Louisville, University of	Louisville, Kentucky	1837	Elmer Wm. Jacobsen	297	5,500 C	127,372	City	1,139,083
Loyola College	Baltimore, Maryland	1852	Edward B. Bunn	23	288 M	35,000	Cath.	2,183,333
Loyola University	Chicago, Illinois	1870	Joseph M. Egan	725	5,795 C	187,292	Cath.	1,417,403
Loyola University of Los Angeles	Los Angeles, California	1911	Thomas J. Whelan	52	708 M	42,000	Cath.	560,000
Loyola University	New Orleans, Louisiana	1912	Edward J. Shields	150	1,526 C	102,476	Cath.	5,000,000
Luther College	Decorah, Iowa	1861	O. J. H. Preus	40	539 C	82,000	Luth.	535,000
Macalester College	St. Paul, Minnesota	1885	Charles J. Turck	58	832 C	40,000	Priv.	2,350,000

McPherson College	McPherson, Kansas	1887	W. W. Peters	20	172 C	15,000	Breth.	397,105
Madison College	Harrisonburg, Virginia	1908	Samuel P. Duke	85	1,285 F	37,565	State	
Maine, University of	Orono, Maine	134	Arthur A. Hauck	134	2,102 C	206,000	State	1,226,400
Manhattan College	North Manchester, Indiana	1889	Vernon F. Schwalm	35	523 C	32,000	Breth.	510,000
Manhattanville College of the Sacred Heart	New York, New York	1853	Brother B. Thomas	60	1,750 M	95,000	Cath.	400,900
Marquette College	New York, New York	1917	Mother E. M. O'Byrne	73	585 F	65,068	Cath.	1,567,882
Marquette University	Marquette, Ohio	1835	William A. Shimer	32	591 C	123,869	Priv.	2,000,000
Marshall College	Milwaukee, Wisconsin	1881	Peter A. Brooks	408	5,340 C	155,000	Cath.	588,000
Mary Baldwin College	Huntington, West Virginia	1837	John D. Williams	84	2,003 C	35,000	State	
Marygrove College	Stanton, Virginia	1842	L. Wilson Jarman	32	320 F	31,000	Priv.	
Mary Hardin-Baylor College	Detroit, Michigan	1910	Sister M. Honora	81	804 F	44,476	Cath.	
Maryland, University of	Belton, Texas	1845	Gordon G. Singleton	50	681 F	61,000	Bapt.	1,100,000
Maryland State Teachers College	College Park, Maryland	1807	H. C. Blackwell	771	5,862 C	183,500	State	2,500,000
Maryland State Teachers College	Salisbury, Maryland	1925	J. D. Blackwell	20	175 C	21,062	State	
Maryhurst College	Towson, Maryland	1866	M. Theresa Wiedefeld	30	273 C	21,000	State	
Marymount College	Marylhurst, Oregon	1930	Sister M. R. Augusta	45	312 F	20,100	Cath.	
Marymount College	Salina, Kansas	1922	Mother M. Chrysostom Wynn	30	251 F	20,100	Cath.	
Marymount College	Tarrytown, New York	1907	M. Therese Dalton	39	450 F	26,750	Cath.	1,000,000
Maryville College	Maryville, Tennessee	1819	Ralph W. Lloyd	37	497 C	50,000	Presb.	1,891,989
Maryville College of the Sacred Heart	St. Louis, Missouri	1872	Mother M. O. Mouton	34	263 F	23,159	Cath.	300,000
Marywood College	Fredericksburg, Virginia	1908	Morgan L. Combs	98	1,406 F	55,000	State	75,000
Massachusetts Institute of Technology	Seranton, Pennsylvania	1915	Sister M. Sylvia	56	531 F	37,000	Cath.	43,100,000
Massachusetts State College	Cambridge, Massachusetts	1861	Karl T. Compton	480	3,000 C	383,738	Priv.	451,629
Massachusetts State Teachers College	Amherst, Massachusetts	1863	Hugh P. Baker	128	1,500 C	137,258	State	
Massachusetts State Teachers College	Bridgewater, Massachusetts	1840	John J. Kelley	40	392 C	25,000	State	
Massachusetts State Teachers College	Fitchburg, Massachusetts	1894	William J. Sanders	41	243 C	18,000	State	
Massachusetts State Teachers College	Framingham, Massachusetts	1839	Martin F. O'Connor	34	453 F	18,000	State	
Massachusetts State Teachers College	North Adams, Massachusetts	1893	Grover C. Bowman	18	75 C	18,000	State	
Massachusetts State Teachers College	Worcester, Massachusetts	1871	Clinton E. Carpenter	20	175 C	16,800	State	
Medical Evangelists, College of	Loma Linda, California	1909	W. E. Macpherson	348	576 C	16,800	Advent.	
Memphis State College	Memphis, Tennessee	1912	Jennings B. Sanders	52	750 C	36,000	State	
Mercer University	Macon, Georgia	1833	Spright Dowell	31	800 C	75,000	Bapt.	2,000,000
Mercyhurst College	Erie, Pennsylvania	1926	Sister M. de Sales Preston	32	225 F	17,000	Cath.	1,600,000
Meredith College	Raleigh, North Carolina	1891	Carlyle Campbell	45	665 F	29,418	Bapt.	555,464
Miami, University of	Coral Gables, Florida	1925	Bowman F. Ashe	106	2,456 C	75,000	Priv.	
Miami University	Oxford, Ohio	1809	A. K. Morris	201	3,230 C	185,000	State	
Michigan, University of	Ann Arbor, Michigan	1817	Alexander G. Ruthven	766	14,387 C	1,240,942	State	16,910,294
Michigan College of Mining and Technology	Houghton, Michigan	1885	Grover C. Dillman	81	722 C	50,000	State	
Michigan State College	East Lansing, Michigan	1855	John A. Hannah	515	8,091 C	205,940	State	1,902,144
Michigan State Normal College	Ypsilanti, Michigan	1849	John M. Munson	160	1,334 C	130,000	State	75,000
Middlebury College	Middlebury, Vermont	1800	Samuel S. Stratton	51	829 C	170,000	Priv.	4,200,000
Middle Tennessee State College	Murfreesboro, Tennessee	1909	Q. M. Smith	42	526 C	30,000	State	
Mills College	Oakland, California	1852	Lynn T. White, Jr.	79	600 F	94,437	Priv.	2,423,069
Millsaps College	Jackson, Mississippi	1892	Marion L. Smith	30	402 C	35,000	Meth.	850,000
Milwaukee-Dowder College	Milwaukee, Wisconsin	1851	Lucia R. Briggs	49	386 F	47,570	Priv.	2,358,187
Miner Teachers College	Washington, D. C.	1879	Eugene A. Clark	52	414 C	35,129	City	
Minnesota, University of	Minneapolis, Minnesota	1851	James L. Morrill	1167	17,551 C	1,327,278	State	25,970,514

Selected List of Accredited United States Colleges and Universities—(cont.)

Institution	Location	Founded	Chief Executive	Fac- ulty	Students No. MFC	Vols. In Library	Control	Endowment
Minnesota State Teachers College.....	Bemidji, Minnesota.....	1919	A. C. Clark.....	44	168 C	27,329	State.....	
Minnesota State Teachers College.....	Duluth, Minnesota.....	1895	Herbert Sorenson.....	48	459 C	28,407	State.....	\$ 23,000
Minnesota State Teachers College.....	Marshall, Minnesota.....	1868	Frank D. McElroy.....	51	485 C	28,565	State.....	
Minnesota State Teachers College.....	Montevideo, Minnesota.....	1887	O. W. Snarr.....	35	247 C	30,000	State.....	
Minnesota State Teachers College.....	St. Cloud, Minnesota.....	1869	Dudley S. Brainard.....	55	1,121 C	50,815	State.....	
Minnesota State Teachers College.....	Winona, Minnesota.....	1858	*Nels Minne.....	39	326 C	27,789	State.....	
Misericordia College.....	Dallas, Pennsylvania.....	1923	Sister M. Gonzaga.....	41	300 F	21,200	Priv.....	1,100,000
Mississippi University of.....	University, Mississippi.....	1848	Alfred B. Butts.....	110	1,811 C	128,031	State.....	733,808
Mississippi College.....	Clinton, Mississippi.....	1826	D. M. Nelson.....	24	679 C	30,000	Bapt.....	700,000
Mississippi Southern College.....	Hattiesburg, Mississippi.....	1912	Robert C. Cook.....	60	496 C	75,000	State.....	
Mississippi State College.....	State College, Mississippi.....	1878	Fred T. Mitchell.....	74	2,200 C	75,799	State.....	239,789
Mississippi State College for Women.....	Columbia, Mississippi.....	1884	B. L. Parkinsell.....	71	1,079 F	66,500	State.....	2,260,600
Missouri, University of.....	Columbia, Missouri.....	1839	F. A. Middlebush.....	365	5,800 C	510,000	State.....	583,000
Missouri Valley College.....	Marshall, Missouri.....	1888	J. Ray Cable.....	25	115 C	24,000	Presb.....	1,921,104
Monmouth College.....	Monmouth, Illinois.....	1853	James H. Grier.....	42	456 C	50,000	Presb.....	800,000
Montana School of Mines.....	Butte, Montana.....	1893	Francis A. Thomson.....	25	170 C	17,000	State.....	
Montana State College.....	Bozeman, Montana.....	1893	Roland R. Renne.....	127	2,009 C	68,015	State.....	877,879
Montana State Normal College.....	Dillon, Montana.....	1893	Sheldon E. Davis.....	7	65 C	26,000	State.....	500,000
Montana State University.....	Missoula, Montana.....	1893	James A. McCain.....	83	1,108 C	25,382	State.....	
Moravian College and Theological Seminary.....	Bethlehem, Pennsylvania.....	1807	Raymond S. Hauptert.....	17	125 M	25,000	Morav.....	
Morehead State Teachers College.....	Morehead, Kentucky.....	1923	W. H. Vaughan.....	50	530 C	32,000	State.....	1,500,000
Morehouse College.....	Atlanta, Georgia.....	1867	Benjamin E. Mays.....	31	491 M	75,000	Bapt.....	
Morgan State College.....	Baltimore, Maryland.....	1867	D. O. W. Holmes.....	38	875 C	35,000	State.....	
Morningside College.....	Sioux City, Iowa.....	1889	Earl A. Roadman.....	40	1,029 C	52,000	Meth.....	601,545
Morris Brown College.....	St. Benedict, Oregon.....	1881	W. A. Fountain, Jr.....	26	481 C	7,078	M. E.....	228,130
Mt. Angel College and Seminary.....	St. Benedict, Oregon.....	1887	Thomas Meier.....	24	180 Co	35,000	Cath.....	6,036,000
Mount Holyoke College.....	South Hadley, Massachusetts.....	1837	Roswell G. Ham.....	134	1,149 F	194,821	Priv.....	
Mount Mary College.....	Milwaukee, Wisconsin.....	1915	Edward A. Fitzpatrick.....	42	470 F	31,792	Cath.....	
Mount Mercy College.....	Pittsburgh, Pennsylvania.....	1929	Mother M. Irenaeus Daugherty.....	32	283 F	25,000	Priv.....	690,000
Mount Saint Joseph—on-the-Ohio, College of.....	Mount St. Joseph, Ohio.....	1920	Sister M. Sheridan.....	43	332 F	31,000	Cath.....	268,840
Mount Saint Mary's College.....	Emmitsburg, Maryland.....	1808	John L. Sheridan.....	25	220 M	50,000	Cath.....	
Mount Saint Mary's College.....	Los Angeles, California.....	1925	Sister Marie de Lourdes.....	37	305 F	17,000	Cath.....	
Mount Saint Scholastica College.....	Atchison, Kansas.....	1863	Mother Lucy Dooley.....	40	359 F	25,000	Cath.....	
Mount Saint Vincent—on-Hudson, College of.....	New York, New York.....	1847	Sister Catherine Marie.....	58	635 F	28,572	Cath.....	240,907
Mount Union College.....	Alliance, Ohio.....	1846	Charles B. Ketcham.....	40	815 C	70,500	Meth.....	1,600,000
Muhlenberg College.....	Allentown, Pennsylvania.....	1848	Levering Tyson.....	48	450 M	78,000	Luth.....	1,100,000
Mundelein College for Women.....	Chicago, Illinois.....	1930	Sister Mary Josephine.....	82	1,026 F	25,876	Cath.....	
Murray State Teachers College.....	Murray, Kentucky.....	1923	R. H. Woods.....	60	527 C	53,783	State.....	940,000
Muskingum College.....	New Concord, Ohio.....	1837	Robert N. Montgomery.....	55	647 C	40,000	Presb.....	136,965
National College of Education.....	Evanston, Illinois.....	1886	Edna Dean Baker.....	48	775 F	30,836	Priv.....	
Nazareth College.....	Louisville, Kentucky.....	1920	Sister M. A. Coady.....	58	890 F	22,095	Cath.....	
Nazareth College.....	Nazareth, Michigan.....	1927	Sister M. Kevin.....	28	323 F	25,000	Cath.....	
Nazareth College.....	Rochester, New York.....	1924	Mother Rose Miriam.....	42	380 F	20,000	Cath.....	
Nebraska University of.....	Lincoln, Nebraska.....	1869	C. S. Boucher.....	306	6,656 C	422,000	State.....	996,250

Nebraska State Teachers College	1905	Herbert L. Cushing	39	424 C	36,000	State	70,000
Nebraska State Teachers College	1910	J. R. Pate	...	500 C	...	State	...
Nebraska State Teachers College	1887	J. T. Anderson	48	884 C	29,267	State	...
Nebraska Wesleyan University	1874	Benjamin F. Schwartz	27	517 C	35,000	Meth.	944,483
Nebraska, University of	1874	John O. Moseley	68	1,100 C	74,363	State	594,832
Newark, University of	1936	George H. Black	35	1,415 C	30,500	Priv.	95,600
Newark College of Engineering	1881	Allan R. Cullimore	86	494 C	19,264	City & State	300,000
Newberry College	1856	James C. Kinard	32	275 C	22,000	Luth.	1,354,943
New Hampshire, University of	1866	Harold M. Stoke	142	2,002 C	133,358	State	...
New Hampshire State Teachers College	1893	E. W. Ireland	92	1,205 C	21,000	State	...
New Haven State Teachers College	1922	Edgar F. Bunce	26	350 C	22,000	State	...
New Jersey State Teachers College	1929	Chris C. Rossey	36	500 C	40,000	State	...
New Jersey State Teachers College	1928	Harry A. Sprague	61	862 C	49,647	State	...
New Jersey State Teachers College	1913	John B. Douglass	40	422 C	36,000	State	...
New Jersey State Teachers College	1855	Clair S. Wightman	24	240 C	17,000	State	...
New Jersey State Teachers College	1855	Roscoe L. West	71	650 C	46,250	State	...
New Mexico, University of	1889	John P. Wernette	115	2,150 C	110,000	State	949,101
New Mexico Coll. of Agr. and Mech. Arts	1889	Hugh M. Milton, II	63	625 C	52,500	State	481,659
New Mexico Highlands University	1893	Edward Eyring	38	465 C	30,662	State	493,167
New Mexico School of Mines	1889	R. H. Reece	10	110 C	6,000	State	...
New Mexico State Teachers College	1893	Haddon W. James	33	400 C	26,400	State	50,000
New Rochelle, College of	1904	Francis W. Walsh	66	868 F	54,819	Cath.	...
New Rochelle, The College of the City of	1847	Harry N. Wright	492	21,445 C	307,116	City	...
N. Y. State Coll. of Forestry at Syracuse Univ.	1911	Joseph S. Illick	35	189 M	54,597	State	...
New York State College for Teachers	1844	John M. Sayles	98	1,166 C	30,000	State	...
New York State Teachers College	1866	Donald M. Tower	41	419 C	18,587	State	...
New York State Teachers College	1872	Harry W. Rockwell	79	1,053 C	32,865	State	...
New York State Teachers College	1869	Donnal V. Smith	52	750 C	25,000	State	100,000
New York State Teachers College	1866	Leslie R. Gregory	44	500 C	18,760	State	...
New York State Teachers College	1867	James B. Wallis	46	334 C	27,941	State	...
New York State Teachers College	1886	Wm. J. Haggerty	38	412 C	24,267	State	...
New York State Teachers College	1889	Charles W. Hunt	39	325 C	24,000	State	...
New York State Teachers College	1861	Ralph W. Sweetman	42	660 C	27,000	State	...
New York State Teachers College	1889	Charles C. Ward	48	525 C	21,308	State	...
New York State Teachers College	1869	O. H. Voelker	46	472 C	16,238	State	...
New York State Teachers College	1831	Harry W. Chase	2073	47,490 C	687,580	Priv.	9,768,066
Niagara University	1856	Joseph M. Noonan	54	926 C	63,000	Cath.	...
North Carolina, Coll. of Agr. and Tech. Arts	1891	Ferdinand D. Bluford	83	1,500 C	32,000	State	3,045,178
North Carolina, University of	1789	Frank P. Graham	308	4,430 C	447,560	State	...
North Carolina Woman's College of the Univ. of Greensboro	1891	Wm. C. Jackson	181	2,138 F	114,185	State	...
North Carolina College for Negroes	1910	James E. Shepard	72	917 C	29,969	State	...
N. C. State Coll. of Agriculture and Engineering	1889	J. W. Harrelson	200	1,266 C	74,488	State	...
North Carolina State Teachers College	1881	Harold L. Trigg	22	562 C	13,500	State	...
North Central College	1861	Edward E. Rall	40	630 C	32,000	Evan.	1,173,330
North Dakota, University of	1883	John C. West	125	1,807 C	147,000	State	1,700,000
North Dakota Agricultural College	1889	Frank L. Eversull	84	1,328 C	67,000	State	1,566,720
N. D. State Normal and Industrial College	1889	John C. McMillan	20	328 C	16,800	State	...

Selected List of Accredited United States Colleges and Universities—(cont.)

Institution	Location	Founded	Chief Executive	Pac- ulty	Students No. MFG	Vols. In Library	Control	Endowment
North Dakota State Teachers College	Dickinson, North Dakota	1918	Charles E. Scott	24	130 C	15,980	State	
North Dakota State Teachers College	Mayville, North Dakota	1889	J. W. Headley	18	280 C	21,771	State	
North Dakota State Teachers College	Minot, North Dakota	1913	C. C. Swain	39	550 C	20,953	State	
North Dakota State Teachers College	Valley City, North Dakota	1889	E. H. Kleinpell	38	288 C	28,980	State	
Northeast Missouri State Teachers College	Kirksville, Missouri	1867	Walter H. Ryle	58	800 C	72,000	State	
Northeastern State College	Tahlequah, Oklahoma	1903	John Vaughan	38	628 C	38,378	State	
Northeastern University	Boston, Massachusetts	1888	Carl Stephens Ell	140	1,483 C	39,944	Priv.	\$ 954,203
Northern Illinois State Teachers College	DeKalb, Illinois	1895	Karl L. Adams	54	762 C	57,730	State	
Northern Michigan College of Education	Marquette, Michigan	1899	Henry A. Tape	60	423 C	31,222	State	
Northern State Teachers College	Aberdeen, South Dakota	1901	N. E. Steele	36	348 C	28,189	State	
North Texas State Teachers College	Denton, Texas	1890	W. Joseph McConnell	175	2,947 C	165,000	State	
Northwestern State College	Alva, Oklahoma	1897	Sabin C. Percefull	31	357 C	22,230	State	
Northwestern State College	Natchitoches, Louisiana	1884	Joe Farrar	79	1,181 C	45,355	State	
Northwestern University	Evanston, Illinois	1851	Franklin B. Snyder	1250	14,253 C	848,792	Priv.	60,000,000
Northwest Missouri State Teachers College	Maryville, Missouri	1906	Uel W. Lamkin	60	500 C	40,000	State	
Northwest Nazarene College	Nampa, Idaho	1913	Lewis T. Corlett	22	571 C	11,000	Naz.	
Norwich University	Northfield, Vermont	1819	Homer L. Dodge	45	550 M	40,000	Priv.	979,370
Notre Dame, University of	Notre Dame, Indiana	1842	John J. Cavanaugh	226	2,832 M	219,214	Cath.	3,000,000
Notre Dame College	South Euclid, Ohio	1922	Mother Mary Vera	29	220 F	23,000	Cath.	
Notre Dame of Maryland, College of	Baltimore, Maryland	1895	Sister Mary Frances	52	382 F	28,000	Cath.	50,000
Notre Dame College of Staten Island	Staten Island, New York	....	Mother Saint Agnes	....	239 F	....	Cath.	
Oberlin College	Oberlin, Ohio	1833	Ernest H. Wilkins	169	1,800 C	449,654	Priv.	23,412,620
Occidental College	Los Angeles, California	1867	Arthur G. Coons	60	913 C	74,980	Priv.	1,239,266
Ohio State University	Columbus, Ohio	1870	H. L. Bevis	800	10,533 C	644,401	State	2,036,957
Ohio University	Athens, Ohio	1804	John C. Baker	196	2,014 C	155,640	State	94,928
Ohio Wesleyan University	Delaware, Ohio	1842	H. J. Burgstahler	88	1,500 C	170,000	Meth.	3,608,000
Oklahoma, University of	Norman, Oklahoma	1890	George L. Cross	315	3,652 C	260,000	State	4,681,889
Oklahoma Agricultural and Mechanical College	Stillwater, Oklahoma	1891	Henry G. Bennett	461	6,942 C	165,000	State	4,083,363
Oklahoma College for Women	Chickasha, Oklahoma	1908	C. Dan Procter	82	1,112 C	33,000	State	
Omaha, University of	Omaha, Nebraska	1908	Rowland Haynes	87	775 F	76,521	City	140,578
Oregon, University of	Eugene, Oregon	1872	Harry K. Newburn	232	4,500 C	358,938	State	857,238
Oregon College of Education	Monmouth, Oregon	1856	C. A. Howard	32	500 C	30,000	State	
Oregon State College	Corvallis, Oregon	1868	A. L. Strand	289	4,213 C	210,000	State	265,872
Ottawa University	Ottawa, Kansas	1865	Andrew B. Martin	25	197 C	20,000	Bapt.	451,651
Otterbein College	Westerville, Ohio	1847	J. Gordon Howard	40	666 C	35,000	Breth.	1,209,709
Ouachita College	Arkadelphia, Arkansas	1886	James Richard Grant	27	666 C	27,000	Bapt.	500,000
Our Lady of the Eims, College of	Chicopee, Massachusetts	1928	Thomas M. O'Leary	20	202 F	....	Cath.	
Our Lady of the Lake College	San Antonio, Texas	1896	John L. McMahon	55	846 F	50,000	Cath.	2,300,000
Pacific, College of the	Stockton, California	1851	Tully C. Knoles	60	602 C	46,700	Priv.	571,292
Pacific Union College	Angwin, California	1909	Henry J. Klooster	49	640 C	31,316	Priv.	339,324
Pacific University	Forest Grove, Oregon	1849	Walter C. Giersbach	26	214 C	30,537	Priv.	35,000
Paine College	Augusta, Georgia	1832	Edmund C. Peters	21	365 C	20,000	M. E.	1,760,725
Park College	Parkville, Missouri	1875	Geo. Irwin Rohrbough	....	500 C	40,000	Presb.	
Parsons College	Fairfield, Iowa	1875	Herbert C. Mayer	24	122 C	24,332	Presb.	544,559

Pennsylvania State College	1855	Ralph D. Hetzel	775	6,600 C	250,000	State	586,783
Pennsylvania State Teachers College	1839	Harvey A. Andruss	27	401 C	25,000	State	517,000
Pennsylvania State Teachers College	1855	Robert M. Steele	24	543 C	23,257	State	
Pennsylvania State Teachers College	1867	Paul G. Chandler	21	160 C	20,632	State	
Pennsylvania State Teachers College	1893	Joseph F. Noonan	38	330 C	22,000	State	
Pennsylvania State Teachers College	1861	L. H. Van Houten	20	171 C	22,000	State	
Pennsylvania State Teachers College	1871	Joseph M. Uhler	87	1,200 C	29,664	State	
Pennsylvania State Teachers College	1866	Q. A. W. Rohrbach	30	325 C	28,958	State	
Pennsylvania State Teachers College	1877	Richard T. Parsons	28	321 C	19,000	State	
Pennsylvania State Teachers College	1858	James G. Morgan	43	285 C	30,964	State	
Pennsylvania State Teachers College	1855	D. L. Biemesderfer	20	236 C	25,833	State	
Pennsylvania State Teachers College	1871	Levi Gilbert	26	332 C	26,000	State	
Pennsylvania State Teachers College	1889	John A. Entz	46	392 C	18,600	State	
Pennsylvania State Teachers College	1871	Charles S. Swope	61	1,150 C	38,000	State	
Phillips University	1907	Eugene S. Briggs	42	654 C	42,000	Dis. of Ch.	780,000
Pittsburgh, University of	1787	R. H. Fitzgerald	883	4,151 C	416,000	State	3,433,467
Plymouth Teachers College	1870	Ernest L. Silver	30	180	18,000	State	
Pomona College	1887	Elijah Wilson Lyon	68	907 C	114,408	Priv.	
Portland, Univ. of	1925	Charles C. Millner	60	585 M	35,000	Cath.	4,092,800
Prairie View University	1876	W. R. Banks	110	1,326 C	26,000	State	30,000
Principia College	1746	Harold W. Dods	315	2,812 M	1,000,000	Priv.	40,000,000
Providence College	1898	Frederic E. Morgan	28	363 C	33,355	Priv.	744,234
Puget Sound, College of	1919	Frederick C. Foley	52	313 M	30,000	Cath.	85,000
Purdue University	1888	R. Franklin Thompson	32	845 C	44,711	Meth.	
Queens College	1869	Frederick L. Howde	605	5,746 C	228,000	State	340,000
Queens College of the City of New York	1857	Hunter B. Blakely	43	466 F	21,000	Presb.	400,000
Radcliffe College	1937	Paul Klapper	149	2,519 C	65,000	City	
Randolph-Macon College	1879	Wilbur K. Jordan	400	1,100 F	96,000	Priv.	5,691,610
Randolph-Macon Women's College	1830	J. Earl Moreland	16	205 M	38,526	Meth.	992,931
Redlands, University of	1893	Theodore H. Jack	72	700 F	62,000	Meth.	1,259,531
Redlands, California	1909	George H. Amacost	58	844 C	67,645	Bapt.	3,000,000
Regis College	1904	Peter H. Odegard	43	557 C	77,000	Priv.	1,636,185
Rensselaer Polytechnic Institute	1927	Sister Mary Honora	51	583 F	25,000	Priv.	9,100,091
R. I. College of Education	1824	Livingston W. Houston	144	2,269 C	38,320	Priv.	
Rhode Island State College	1854	Lucius A. Whipple	54	305 C	27,616	State	
Rice Institute	1892	Carl R. Woodward	71	1,168 C	78,747	State	
Richmond, University of	1912	William V. Houston	80	1,400 C	175,000	Priv.	18,700,000
Ripon College	1832	F. W. Boatwright	76	2,295 C	100,000	Bapt.	2,936,316
Roanoke College	1851	Clark G. Kuebler	30	541 C	41,244	Priv.	883,854
Rochester, University of	1842	Charles J. Smith	30	391 C	25,000	Priv.	700,000
Rockford College	1850	Alan Valentine	650	2,680 C	436,703	Priv.	53,256,317
Rockhurst College	1847	Mary Ashby Cheek	43	566 F	34,000	Priv.	991,185
Rollins College	1910	William Hugh McCabe	15	179 M	25,000	Cath.	950,000
Rosary College	1885	Hamilton Holt	54	525 C	65,000	Priv.	100,472
Rosemont College	1901	Sister Mary Peter	64	724 F	52,000	Cath.	
	1921	Mother M. Cleophas	44	308 F	35,778	Cath.	

Selected List of Accredited United States Colleges and Universities—(cont.)

Institution	Location	Founded	Chief Executive	Faculty	Students No. MFO	Vols. in library	Control	Endowment
Rose Polytechnic Institute.....	Terre Haute, Indiana.....	1874	Donald B. Prentice.....	22	320 M	23 000	Priv.....	\$2,100,000
Russell Sage College.....	Troy, New York.....	1916	Helen M. McKinstry.....	70	725 F	42,941	Priv.....	1,059,237
Rutgers University.....	New Brunswick, New Jersey.....	1766	Robert C. Clothier.....	353	2,751 Co	367,640	State & Priv.....	5,800,000
St. Ambrose College and Marycrest College.....	Davenport, Iowa.....	1882	Ambrose J. Burke.....	23	239 C	25 000	Cath.....	600,000
St. Anselm's College.....	Manchester, New Hampshire.....	1893	Bertrand C. Dolan.....	20	275 M	12 000	Cath.....	200,000
St. Augustine's College.....	Raleigh, North Carolina.....	1867	Edgar H. Goid.....	19	337 C	16,600	Episc.....	10,800
St. Benedict, College of.....	St. Joseph, Minnesota.....	1913	Mother R. Pratschner.....	36	240 F	30 000	Cath.....	
St. Benedict's College.....	Atchison, Kansas.....	1856	Cuthbert McDonald.....	28	177 M	80 000	Cath.....	
St. Bernardine of Siena College.....	Loudonville, New York.....	1937	Rev. M. Kennedy.....	34	1,305 M	73 000	Cath.....	616,250
St. Bonaventure College.....	St. Bonaventure, New York.....	1859	Thomas Plassmann.....	43	276 C	66,730	Cath.....	
St. Catherine, College of.....	St. Paul, Minnesota.....	1911	Sister Antonius.....	72	778 F	14 000	Cath.....	
St. Edward's Seminary.....	Seattle, Washington.....	1931	John P. McCormick.....	17	140 M	26 000	Cath.....	
St. Elizabeth, College of.....	Convent Station, New Jersey.....	1899	Sister Mary J. Byrne.....	54	579 F	24 000	Cath.....	16,000
St. Francis, College of.....	Joliet, Illinois.....	1925	Sister M. Ancetta.....	39	686 F	10 000	Priv.....	
St. Francis College.....	Loretto, Pennsylvania.....	1847	John P. J. Sullivan.....	18	250 C	60 000	Cath.....	
St. Francis Xavier College for Women.....	Chicago, Illinois.....	1912	Sister Mary Huberta.....	44	600 F	67,979	Cath.....	
St. John's University.....	Brooklyn, New York.....	1870	William J. Mahoney.....	115	4,770 C	17,521	Cath.....	
St. Joseph College.....	Hartford, Connecticut.....	1932	Sister M. Rosa.....	38	400 F	15 000	Cath.....	
St. Joseph's College.....	Emmitsburg, Maryland.....	1809	Francis J. Dodd.....	32	173 F	12 500	Cath.....	
St. Joseph's College.....	Philadelphia, Pennsylvania.....	1851	John J. Long.....	38	205 M	20 446	Cath.....	29 000
St. Joseph's College for Women.....	Brooklyn, New York.....	1856	Eugene Garrett Bewkes.....	45	505 F	82 000	Priv.....	1,661,818
St. Lawrence University.....	Canton, New York.....	1818	Patrick J. Holloran.....	59	645 C	464,320	Cath.....	9,082,154
St. Louis University.....	St. Louis, Missouri.....	1895	Raphael Heider.....	854	6,402 C	20 000	Cath.....	
St. Martin's College.....	Lacey, Washington.....	1923	Arthur M. Murphy.....	17	24 M	20 000	Cath.....	
St. Mary College.....	Xavier, Kansas.....	1911	Arthur M. Anacletus.....	43	494 F	26 000	Cath.....	
St. Mary of the Springs College.....	Columbus, Ohio.....	1926	Sister Mary Benedictus.....	34	261 F	33,298	Cath.....	
St. Mary-of-the-Wasatch.....	Salt Lake City, Utah.....	1840	Sister Mary Bernard.....	19	103 F	11,797	Cath.....	550,000
St. Mary-of-the-Woods College.....	St. Mary-of-the-Woods, Indiana.....	1844	Sister Mary Madeleva.....	49	363 F	62,749	Cath.....	
St. Mary's College, Notre Dame.....	Holy Cross, Indiana.....	1848	Daniel H. Conway.....	53	529 M	34 800	Cath.....	
St. Mary's College.....	St. Mary's, Kansas.....	1912	Brother Joel.....	27	180 F	31 000	Cath.....	
St. Mary's College.....	Winona, Minnesota.....	1904	James H. Petty.....	30	469 M	25 000	Cath.....	83,000
St. Michael's College.....	Winooski Park, Vermont.....	1898	B. H. Pennings.....	25	138 M	30 000	Cath.....	
St. Norbert College.....	West DePere, Wisconsin.....	1874	Clemens M. Granskou.....	70	1,114 C	29 000	Cath.....	1,012,022
St. Olaf College.....	Northfield, Minnesota.....	1872	Vincent J. Hart.....	30	225 M	60 800	Luth.....	
St. Peter's College.....	Jersey City, New Jersey.....	1920	Edmund Gibbons.....	22	439 F	21 000	Cath.....	90,737
St. Rose, College of.....	Albany, N. Y.....	1912	Mother M. Athanasius.....	52	498 F	16,101	Priv.....	
St. Scholastica, College of.....	Duluth, Minnesota.....	1910	Sister M. A. Molloy.....	45	498 F	25 000	Cath.....	
St. Teresa, College of.....	Winona, Minnesota.....	1885	Vincent J. Flynn.....	42	587 F	34 000	Cath.....	297,950
St. Thomas, College of.....	St. Paul, Minnesota.....	1846	Alfred Koch.....	30	897 M	34,994	Cath.....	1,773,624
St. Vincent College.....	Lafayette, Pennsylvania.....	1772	H. E. Rondthaler.....	32	128 M	65,274	Cath.....	660,243
Salem College.....	Winston-Salem, North Carolina.....	1879	Harmon Lowman.....	41	342 C	29,729	Morav.....	
Sam Houston State Teachers College.....	Huntsville, Texas.....	1900	Karl E. Downs.....	63	1,400 C	57,483	State.....	6,861
Samuel Huston College.....	Austin, Texas.....	1900		72	2,400 C	92,716	Meth.....	

Year	Organization	Location	President	Secretary	Treasurer	Members	Assets	Liabilities	Net Worth
1930	San Francisco College for Women	San Francisco, California	Mother Leonor Mejia	J. Paul Leonard	38	420 F	100,000	Cath.	
1899	San Francisco State College	San Francisco, California	J. Paul Leonard	T. W. MacQuarrie	79	1,605 C	43,917	State	
1957	San Jose State College	San Jose, California	Clarence L. Phelps	Charles J. Walsh	140	3,561 C	87,459	State	
1909	Santa Barbara College	Santa Barbara, California	Harold Taylor	Hugh C. Sluntz	95	902 C	35,000	State	
1851	Santa Clara, University of	Bronxville, New York	William C. Nevils	Fredrick Hard	36	189 C	75,000	State	315,367
1926	Sarah Lawrence College	Nashville, Tennessee	Harold O. Small	Charles H. Watson	55	297 F	45,368	Priv.	2,500,000
1982	Searritt College	Scranton, Pennsylvania	James F. Kelley	Robert A. Reeves	14	141 C	15,000	Meth.	950,636
1988	Scranton, University of	Scranton, Pennsylvania	W. H. S. White	Paul M. Cousins	23	1,267 C	26,185	Cath.	100,000
1926	Scripps College	Claremont, California	Edwin E. Voigt	Ernest E. Smith	91	1,103 C	30,615	Priv.	500,000
1982	Seattle College	Seattle, Washington	John R. Hagan	Henry T. Moore	29	2,000 M	27,000	Cath.	350,000
1891	Seattle Pacific College	Seattle, Washington	Herbert Davis	Alexander Guerry	37	478 F	37,637	Priv.	455,000
1918	Seton Hill College	Greensburg, Pennsylvania	Norman M. Smith	M. F. Whitaker	19	549 C	27,000	Cath.	
1856	Shaw University	Raleigh, North Carolina	Joseph P. Connolly	Lyman E. Jackson	35	707 C	15,000	Bapt.	
1865	Shepherd State College	Shepherdstown, West Virginia	I. D. Weeks	Joseph P. Connolly	57	478 F	37,637	Priv.	
1873	Shorter College	Rome, Georgia	Lyman E. Jackson	T. T. Montgomery	26	229 C	21,500	Bapt.	
1919	Siena Heights College	Adrian, Michigan	Walter W. Parker	Walter W. Parker	27	320 F	23,000	Cath.	
1899	Simmons College	Boston, Massachusetts	R. B. von KleinSmid	Chester F. Loy	152	1,500 F	94,301	Priv.	3,250,695
1860	Simpson College	Indianola, Iowa	Bancroft Beatley	Edwin E. Voigt	27	360 C	31,000	Meth.	1,398,285
1883	Sioux Falls College	Sioux Falls, South Dakota	Ernest E. Smith	John R. Hagan	24	152 C	15,986	Bapt.	61,321
1928	Sioux Falls College	Sioux Falls, South Dakota	John R. Hagan	Henry T. Moore	18	300 C	18,760	State	
1911	Sisters College of Cleveland	Cleveland, Ohio	Henry T. Moore	Herbert Davis	82	951 F	58,544	Priv.	881,593
1871	Skidmore College	Saratoga Springs, New York	Herbert Davis	Alexander Guerry	256	2,355 F	320,722	Priv.	6,775,441
1857	Smith College	Northampton, Massachusetts	Alexander Guerry	Norman M. Smith	127	1,124 C	171,000	Episc.	2,150,000
1801	South, University of the	Sewanee, Tennessee	Norman M. Smith	M. F. Whitaker	86	1,062 C	24,000	State	
1896	South Carolina, University of	Columbia, South Carolina	I. D. Weeks	Joseph P. Connolly	87	914 C	117,750	State	250,000
1882	South Carolina State A & M College	Orangeburg, South Carolina	Joseph P. Connolly	Lyman E. Jackson	22	315 C	22,000	State	598,972
1885	South Dakota, University of	Vermillion, South Dakota	Lyman E. Jackson	T. T. Montgomery	88	870 C	81,671	State	
1881	South Dakota School of Mines & Technology	Rapid City, South Dakota	T. T. Montgomery	Walter W. Parker	46	460 C	34,272	State	
1909	South Dakota St. Coll. of Agr. and Mech. Arts	Brookings, South Dakota	Walter W. Parker	Walter W. Parker	50	1,274 C	80,000	State	
1873	Southeastern State College	Durant, Oklahoma	R. B. von KleinSmid	Chester F. Loy	750	12,000 C	323,938	Priv.	1,600,000
1879	Southeast Missouri State Teachers College	Cape Girardeau, Missouri	Chester F. Loy	Umphrey Lee	126	1,527 C	55,000	State	2,650,804
1869	Southern California, University of	Los Angeles, California	Umphrey Lee	Kenneth A. Wright	145	4,438 C	125,000	Meth.	
1911	Southern Illinois Normal University	Carbondale, Illinois	Kenneth A. Wright	Walter Redford	35	320 C	9,000	Advent.	
1893	Southern Methodist University	Dallas, Texas	Walter Redford	William A. Thompson	20	206 C	14,000	State	
1897	Southern Missionary College	Collegedale, Tennessee	William A. Thompson	Felton G. Clark	30	206 C	14,000	State	126,888
1926	Southern Oregon College of Education	Ashland, Oregon	Felton G. Clark	Charles E. Diehl	17	300 C	16,883	State	
1897	Southern State Normal School	Springfield, South Dakota	Charles E. Diehl	Charles E. Diehl	112	1,055 C	31,000	State	
1880	Southern Univ. and Agr. and Mech. College	Scottsbluff, Nebraska	Charles E. Diehl	Charles E. Diehl	37	711 C	54,481	Presb.	1,414,000
1885	Southern at Memphis	Memphis, Tennessee	Charles E. Diehl	Charles E. Diehl	32	401 C	28,000	Meth.	611,000
1901	Southwestern College	Winfield, Kansas	Charles E. Diehl	Charles E. Diehl	39	655 C	32,546	State	
1898	Southwestern Institute of Technology	Weatherford, Oklahoma	Charles E. Diehl	Charles E. Diehl	123	2,510 C	55,000	State	
1840	Southwestern Louisiana Institute	Lafayette, Louisiana	Charles E. Diehl	Charles E. Diehl	78	1,557 C	67,000	Meth.	747,000
1906	Southwestern University	Georgetown, Texas	Charles E. Diehl	Charles E. Diehl	81	870 C	69,374	State	
1906	Southwestern University	Georgetown, Texas	Charles E. Diehl	Charles E. Diehl	60	827 C	76,971	State	
1906	Southwest Missouri State Teachers College	Springfield, Missouri	Charles E. Diehl	Charles E. Diehl	43	490 F	29,709	Y. M. C. A.	
1899	Southwest Missouri State Teachers College	Springfield, Missouri	Charles E. Diehl	Charles E. Diehl					3,178,000
1899	Southwest Texas State Teachers College	San Marcos, Texas	Charles E. Diehl	Charles E. Diehl					1,078,000
1881	Spelman College	Atlanta, Georgia	Florence M. Read	Ernest M. Best					
1885	Springfield Coll	Springfield, Massachusetts	Ernest M. Best						

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Spring Hill College.....	Spring Hill, Alabama	1830	William D. O'Leary.....	30	578 C	49,310	Cath.....	\$ 220,000
Stanford University.....	Stanford University, California	1885	Donald B. Tresidder.....	625	4,868 C	920,000	Priv.....	34,931,350
Stevens Institute of Technology.....	Hoboken, New Jersey	1870	Harvey N. Davis.....	68	700 M	32,000	Priv.....	
Stephen F. Austin State Teachers College.....	Nacogdoches, Texas				649 C			
Stout Institute.....	Menomonee, Wisconsin	1903	Verne C. Fryklund.....	44	611 C	29,799	State.....	
Stowe Teachers College.....	St. Louis, Missouri	1890	Ruth M. Harris.....	21	489 C	15,000	Cath.....	
Sul Ross State Teachers College.....	Alpine, Texas	1920	R. M. Hawkins.....	27	385 C	26,260	State.....	
Susquehanna University.....	Selinsgrove, Pennsylvania	1858	G. Morris Smith.....	28	227 C	22,000	Luth.....	
Swarthmore College.....	Swarthmore, Pennsylvania	1864	John Nason.....	109	880 C	141,482	Friends.....	470,000
Sweet Briar College.....	Sweet Briar, Virginia	1901	Martha B. Lucas.....	54	450 F	62,140	Priv.....	8,364,311
Syracuse University.....	Syracuse, New York	1870	William P. Tolley.....	688	5,489 C	351,186	Priv.....	795,000
Talladega College.....	Talladega, Alabama	1867	Adam Daniel Beittel.....	29	267 C	40,422	Priv.....	
Tarkio College.....	Tarkio, Missouri	1883	M. Earle Collins.....	22	200 C	19,000	Presb.....	1,133,389
Temple University.....	Philadelphia, Pa	1884	Robert L. Johnson.....	553	9,000 C	198,000	Priv.....	600,000
Tennessee, University of.....	Knoxville, Tennessee	1794	James D. Hoskins.....	224	2,467 C	207,288	State.....	196,272
Tennessee Agr. and Ind. State Teachers Coll.....	Nashville, Tennessee	1912	W. S. Davis.....	71	1,427 C	50,000	State.....	612,945
Tennessee Polytechnic Institute.....	Cookeville, Tennessee	1915	Everett Derryberry.....	50	750 C	30,000	State.....	
Tennessee State College, East.....	Johnson City, Tennessee	1911	Charles C. Sherrod.....	48	610 C	33,000	State.....	
Texas, Agriculture and Mechanical College of.....	College Station, Texas	1876	Gibb Gilchrist.....	300	4,476 M	121,392	State.....	322,742
Texas, University of.....	Austin, Texas	1881	M. E. Sadler.....	438	9,300 C	780,000	State.....	64,923,600
Texas Christian University.....	Fort Worth, Texas	1873	D. R. Glass.....	138	3,000 C	100,000	Dis. of Ch.....	4,000,000
Texas College.....	Tyler, Texas	1894	E. N. Jones.....	23	689 C	10,000	Meth.....	
Texas College of Arts and Industries.....	Kingsville, Texas	1923	E. M. Wiggins.....	49	840 C	29,600	State.....	
Texas College of Mines and Metallurgy.....	El Paso, Texas	1914	Louis H. Hubbard.....	52	1,329 C	36,442	State.....	
Texas State College for Women.....	Denton, Texas	1901	William M. Whyourn.....	161	2,524 F	95,000	State.....	579,748
Texas Technological College.....	Lubbock, Texas	1925	William F. Zimmerman.....	163	3,747 C	96,200	State.....	
Thiel College.....	Greenville, Pennsylvania	1866	John A. Ross, Jr.....	20	225 C	20,000	Luth.....	170,000
Thomas S. Clarkson Mem. Coll. of Technology.....	Potsdam, New York	1895	William H. Jones.....	31	385 M	10,000	Priv.....	1,400,000
Tillotson College.....	Austin, Texas	1877	Philip C. Nash.....	28	531 C	21,000	Priv.....	2,000
Toledo, University of.....	Toledo, Ohio	1872	Judson L. Cross.....	145	3,600 C	87,638	City.....	75,000
Tougaloo College.....	Tougaloo, Mississippi	1869	Henry Noble Sherwood.....	18	196 C	13,825	Am. Miss.....	54,735
Transylvania College.....	Lexington, Kentucky	1780	G. Keith Funston.....	18	187 C	53,174	Dis. of Ch.....	708,726
Trinity College.....	Hartford, Connecticut	1823	Sister Catherine Dorothea.....	33	500 M	140,000	Priv.....	3,797,882
Trinity College.....	Washington, D. C.	1897	Leonard Carmichael.....	58	470 F	44,000	Cath.....	530,531
Tufts College.....	Medford, Massachusetts	1852	Rufus C. Harris.....	570	2,407 C	200,000	Priv.....	8,825,715
Tulane University of Louisiana.....	New Orleans, Louisiana	1834	C. I. Pontius.....	664	3,555 C	400,000	Priv.....	10,889,533
Tulsa, University of.....	Tulsa, Oklahoma	1894	Jere A. Moore.....	76	2,700 C	80,940	Priv.....	1,366,935
Tusculum College.....	Greeneville, Tennessee	1794	F. D. Patterson.....	22	200 C	19,000	Priv.....	800,000
Tuskegee Institute.....	Tuskegee Institute, Alabama	1881	Conway Boatman.....	130	1,668 C	50,000	Priv.....	7,101,325
Union College.....	Barbourville, Kentucky	1879	Cartier Davidson.....	21	188 C	17,000	Meth.....	478,000
Union College.....	Lincoln, Nebraska	1891	E. E. Cossentine.....	42	658 C	34,977	Advent.....	
Union College.....	New York, New York	1795	Henry P. Van Dusen.....	65	869 M	115,000	Priv.....	4,000,000
Union Theological Seminary.....	New York, New York	1836	James Pine.....	26	458 C	230,000	Priv.....	8,000,000
U. S. Coast Guard Academy.....	New London, Connecticut	1869		45	400 M	25,204	Govt.....	

Upsala College.....	East Orange, New Jersey	1893	E. B. Lawson.....	2,747	103,000	Govt.	204,985
Ursinus College.....	Collegeville, Pennsylvania	1869	Norman E. McClure.....	22	750 C	Luth.	18,200
Utah, University of.....	Cleveland, Ohio	1871	Mother Marie Sands.....	41	587 C	Priv.	34,000
Utah State Agriculture College.....	Salt Lake City, Utah	1850	Lefroy E. Cowles.....	32	240 F	Cath.	778,486
Valparaiso University.....	Logan, Utah.....	1888	Franklin Stewart Harris.....	331	5,735 C	State	174,000
Vanderbilt University.....	Valparaiso, Indiana	1859	O. P. Kretzmann.....	129	2,800 C	State	94,388
Vassar College.....	Nashville, Tennessee	1872	Oliver C. Carmichael.....	65	995 C	Luth.	50,000
Vermont, Univ. of State Agricultural College.....	Poughkeepsie, New York	1861	Henry N. MacCracken.....	301	2,000 C	Priv.	454,626
Villa Maria College.....	Burlington, Vermont	1791	John S. Mills.....	198	1,371 F	Priv.	250,000
Villanova College.....	Erie, Pennsylvania	1925	Sister M. Doloretta.....	164	753 C	St. & Priv.	156,450
Villanova, University of.....	Villanova, Pennsylvania	1942	F. X. N. McGuire.....	32	248 F	Cath.	15,000
Virginia Military Institute.....	Charlottesville, Virginia	1819	John L. Newcomb.....	157	2,300 C	Cath.	75,143
Virginia Polytechnic Institute.....	Lexington, Virginia	1839	C. E. Kilbourne.....	205	2,715 C	State	443,128
Virginia State College for Negroes.....	Blacksburg, Virginia	1872	John R. Hutcheson.....	47	700 M	State	72,363
Virginia State Teachers College.....	Ettrick, Virginia	1882	L. H. Foster.....	171	1,332 C	State	113,363
Virginia State Teachers College.....	Farmville, Virginia	1884	Joseph L. Jerman.....	90	1,204 C	State	32,610
Virginia Union University.....	Radford, Virginia	1910	David Wilbur Peters.....	58	866 F	State	35,528
Wabash College.....	Richmond, Virginia	1865	John Malous Ellison.....	51	511 F	State	29,450
Wagner Memorial Lutheran College.....	Crawfordsville, Indiana	1832	Frank Hugh Sparks.....	38	884 C	Bapt.	19,700
Wake Forest College.....	Staten Island, New York	1883	Walter C. Langsam.....	21	450 M	Priv.	91,886
Walla Walla College.....	Wake Forest, North Carolina	1834	Thurman D. Kitchin.....	50	450 C	Luth.	38,826
Washington Municipal University of Topeka.....	College Place, Washington	1892	George W. Bowers.....	56	1,497 C	Bapt.	80,000
Washington, State College of.....	Topeka Kansas	1865	Bryan S. Stoffer.....	40	724 C	Advent.	22,729
Washington, University of.....	Pullman, Washington	1890	Wilson Compton.....	54	1,350 C	City	58,258
Washington and Jefferson College.....	Seattle, Washington	1861	Lee Paul Sieg.....	216	3,951 C	State	500,000
Washington and Lee University.....	Washington, Pennsylvania	1780	James H. Case, Jr.....	690	12,427 C	State	577,582
Washington College.....	Lexington, Virginia	1749	Francis P. Jones.....	25	420 M	Priv.	65,090
Washington Missionary College.....	Chestertown, Maryland	1782	Gilbert W. Mead.....	32	950 M	Priv.	130,500
Washington University.....	Takoma Park, Maryland	1904	Benj. G. Wilkinson.....	27	310 C	Priv.	50,000
Wayne University.....	St. Louis, Missouri	1853	Arthur H. Compton.....	29	558 C	Priv.	31,572
Webster College.....	Detroit, Michigan	1868	David D. Henry.....	693	9,159 C	Priv.	355,343
Wellesley College.....	Webster Groves, Missouri	1915	George D. Donovan.....	759	12,140 C	City	252,931
Wells College.....	Wellesley, Massachusetts	1870	Mildred M. Horton.....	52	316 F	Cath.	25,355
Wesleyan College.....	Aurora, New York	1868	Richard L. Greene.....	192	1,597 F	Priv.	234,000
Wesleyan University.....	Macon, Georgia	1835	N. C. McPherson, Jr.....	45	325 F	Priv.	100,680
Western Carolina Teachers College.....	Middletown, Connecticut	1831	Victor L. Butterfield.....	64	652 F	Meth.	31,000
Western College.....	Culwhee, North Carolina	1889	Hiram T. Hunter.....	68	650 M	Priv.	320,000
Western Illinois State Teachers College.....	Oxford, Ohio	1853	Philip E. Henderson.....	44	346 C	State	20,698
Western Kentucky State Teachers College.....	Macomb, Illinois	1899	F. A. Beu.....	44	500 F	Priv.	46,114
Western Maryland College.....	Bowling Green, Kentucky	1906	Paul L. Garrett.....	81	1,000 C	State	57,341
Western Michigan College of Education.....	Westminster, Maryland	1867	Fred G. Holloway.....	90	964 C	State	65,000
Western Reserve University.....	Kalamazoo, Michigan	1903	Paul V. Sangren.....	45	582 C	Meth.	43,572
Western State College of Colorado.....	Cleveland, Ohio	1826	Winifred G. Leutner.....	220	1,900 C	State	65,000
Western Washington College of Education.....	Gunnison, Colorado	1911	Charles C. Casey.....	700	3,158 C	Priv.	574,000
West Liberty State College.....	Bellingham, Washington	1893	William W. Haggard.....	27	500 C	State	32,344
	West Virginia	1837	Paul N. Elbin.....	57	410 C	State	67,551
				23	237 C	State	18,081

15,969
12,411,784
1,506,878
1,018,000
8,800,000
787,863
900,000
16,755,540

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Westminster College.....	Fulton, Missouri.....	1851	Franc L. McCluer.....	18	102 M	29,794	Presb.....	\$ 600,000
Westminster College.....	New Wilmington, Pennsylvania.....	1852	R. F. Galbreath.....	51	791 C	30,500	Presb.....	900,000
West Texas State Teachers College.....	Canyon, Texas.....	1910	J. A. Hill.....	78	1,201 C	219,250	State.....	
West Virginia State College.....	Institute, West Virginia.....	1891	John W. Davis.....	54	860 C	29,216	State.....	
West Virginia University.....	Morgantown, West Virginia.....	1867	Irwin S. Stewart.....	272	4,036 C	188,000	State.....	115,500
West Virginia Wesleyan College.....	Buckhannon, West Virginia.....	1890	A. A. Schoolcraft.....	27	227 C	26,000	Meth.....	337,181
Wheaton College.....	Norton, Massachusetts.....	1834	A. Howard Menely.....	68	471 F	57,112	Presb.....	1,200,774
Wheaton College.....	Wheaton, Illinois.....	1860	V. R. Edman.....	86	1,500 C	90,000	Presb.....	706,617
Whitman College.....	Walla Walla, Washington.....	1859	Winslow S. Anderson.....	41	650 C	77,560	Presb.....	1,318,114
Whittier College.....	Whittier, California.....	1901	William C. Jones.....	43	590 C	50,000	Presb.....	700,000
Whitworth College.....	Spokane, Washington.....	1890	Frank F. Warren.....	32	580 C	18,000	Presb.....	30,000
Wichita, Municipal University of.....	Wichita, Kansas.....	1926	William M. Jardine.....	70	1,692 C	71,485	City.....	94,274
Wiley College.....	Marshall, Texas.....	1873	E. C. McLead.....	26	562 C	16,214	Meth.....	600,000
Willamette University.....	Salem, Oregon.....	1842	G. Herbert Smith.....	50	696 C	36,000	Meth.....	1,800,000
William and Mary, College of.....	Williamsburg, Virginia.....	1693	John Edwin Pomfret.....	101	1,374 C	246,450	State.....	1,692,522
William Jewell College.....	Liberty, Missouri.....	1849	Walter Pope Binns.....	33	545 C	56,146	Bapt.....	1,448,703
Williams College.....	Williamstown, Massachusetts.....	1793	James P. Baxter.....	45	517 M	201,923	Presb.....	11,562,080
Williamson State Teachers College.....	Williamstown, Connecticut.....	1889	George H. Shaler.....	40	135 C	9,000	State.....	
Wilmington College.....	Wilmington, Ohio.....	1870	S. Arthur Watson.....	24	142 C	20,722	Friends.....	312,000
Wilson College.....	Chambersburg, Pennsylvania.....	1869	Paul Swain Havens.....	55	435 F	55,000	Presb.....	865,205
Winston-Salem Teachers College.....	Winston-Salem, North Carolina.....	1892	Francis L. Atkins.....	26	679 C	22,244	State.....	
Winthrop College.....	Rock Hill, South Carolina.....	1886	Henry R. Sims.....	112	1,548 F	63,000	State.....	
Winthrop, University of.....	Madison, Wisconsin.....	1848	Edwin Brown Fred.....	899	12,500 C	1,200,000	State.....	2,711,272
Wisconsin State Teachers College.....	Eau Claire, Wisconsin.....	1916	W. R. Davies.....	44	600 C	31,000	State.....	
Wisconsin State Teachers College.....	LaCrosse, Wisconsin.....	1909	Rexford S. Mitchell.....	54	580 C	35,900	State.....	
Wisconsin State Teachers College.....	Milwaukee, Wisconsin.....	1880	Frank E. Baker.....	83	1,200 C	62,196	State.....	
Wisconsin State Teachers College.....	Oshkosh, Wisconsin.....	1871	Forrest R. Polk.....	49	550 C	14,000	State.....	
Wisconsin State Teachers College.....	Platteville, Wisconsin.....	1866	Chester O. Newlun.....	40	356 C	27,000	State.....	
Wisconsin State Teachers College.....	River Falls, Wisconsin.....	1874	J. H. Ames.....	41	375 C	21,885	State.....	
Wisconsin State Teachers College.....	Central, Stevens Point, Wisconsin.....	1894	William C. Hansen.....	42	450 C	40,000	State.....	
Wisconsin State Teachers College.....	Superior, Wisconsin.....	1893	Jim Dan Hill.....	44	503 C	32,978	State.....	
Wisconsin State Teachers College.....	Whitewater, Wisconsin.....	1863	Glaude M. Yoder.....	50	800 C	35,000	State.....	
Wittenberg College.....	Springfield, Ohio.....	1845	Rees E. Tulloss.....	45	800 C	75,000	Luth.....	2,087,875
Woiford College.....	Spartanburg, South Carolina.....	1854	Walter K. Greene.....	15	262 M	40,000	Meth.....	846,218
Wooster, College of.....	Wooster, Ohio.....	1866	Howard Foster Lowry.....	70	890 C	100,739	Presb.....	3,200,000
Worcester Polytechnic Institute.....	Worcester, Massachusetts.....	1865	Wat T. Cluverius.....	54	517 M	35,000	Presb.....	4,199,996
Wyoming, University of.....	Laramie, Wyoming.....	1887	G. D. Humphrey.....	160	1,509 C	124,685	State.....	
Xavier University.....	Cincinnati, Ohio.....	1831	Celestin J. Steiner.....	55	337 C	84,101	Cath.....	
Xavier University.....	New Orleans, Louisiana.....	1925	Mother M. Agatha.....	65	625 C	44,069	Cath.....	470,655
Yale University.....	New Haven, Connecticut.....	1701	Charles Seymour.....	731	5,700 C	3,432,363	Cath.....	121,374,572
Yankton College.....	Yankton, South Dakota.....	1881	J. Clarke Graham.....	28	161 C	40,000	Presb.....	701,486
Youngtown College.....	Youngstown, Ohio.....	....	Howard W. Jones.....	....	2,400 C	....	Presb.....	

Approved Medical Schools in the United States

Source: American Medical Association.

Name and location of school	1947 premedical requirements by years	Number of students 1945-46	Graduates July 1, 1945 to May 31, 1946	Executive officer
University of Arkansas School of Medicine, Little Rock, Ark.	2	248	67	Byron L. Robinson, M.D., Dean
University of California Medical School, Berkeley-San Francisco, Calif.	3	276	73	Francis Scott Smyth, M.D., Dean
College of Medical Evangelists, Loma Linda-Los Angeles, Calif.	3	339	93	Harold Shryock, M.D., Dean, Loma Linda; W. F. Norwood, Ph.D., Dean, Los Angeles
University of Southern California School of Medicine, Los Angeles, Calif.	3	253	63	Burrell O. Raulston, M.D., Dean
Stanford University School of Medicine, San Francisco, Calif.	3	236	..	Loren Roscoe Chandler, M.D., Dean
University of Colorado School of Medicine, Denver, Colo.	3	232	54	Ward Darley, M.D., Dean
Yale University School of Medicine, New Haven, Conn.	3	244	59	Francis G. Blake, M.D., Dean
Georgetown University School of Medicine, Washington, D. C.	3	354	81	David V. McCauley, S.J., Ph.D., Dean
George Washington University School of Medicine, Washington, D. C.	3	325	83	Walter A. Bloedorn, M.D., Dean
Howard University College of Medicine, Washington, D. C.	2	274	58	Joseph L. Johnson, M.D., Dean
Georgetown University School of Medicine, Atlanta, Ga.	3	237	64	Eugene A. Stead, Jr., M.D., Dean
University of Georgia School of Medicine, Augusta, Ga.	3	286	68	G. Lombard Kelly, M.D., Dean
Indiana University School of Medicine, Chicago, Ill.	3	309	68	James J. Smith, M.D., Dean
Northwestern University Medical School, Chicago, Ill.	3	565	155	J. Roscoe Miller, M.D., Dean
University of Chicago, The School of Medi- cine, Chicago, Ill.	3	247	58	A. C. Bachmeyer, M.D., Asso. Dean, Biology Div.; F. J. Mullin, Ph.D., Dean of Students
University of Illinois College of Medicine, Chicago, Ill.	3	647	185	Andrew C. Ivy, M.D., Vice President
Indiana University School of Medicine, Bloomington-Indianapolis, Ind.	3	350	183*	John D. Van Nuys, M.D., Ex. Sec., Admin. Com.
University of Iowa College of Medi- cine, Iowa City, Iowa	3	293	67	Ewen Murchison MacEwen, M.D., Dean
University of Kansas School of Medicine, Lawrence-Kansas City, Kans.	90 sem. hrs.	291	75	Harry R. Wahl, M.D., Dean
University of Louisville School of Medicine, Louisville, Ky.	2	351	91	John Walker Moore, M.D., Dean
Louisiana State University School of Medi- cine, New Orleans, La.	3	310	67	Vernon W. Lippard, M.D., Dean
Louisiana University School of Medicine, New Orleans, La.	3	474	260*	Maxwell E. Lapham, M.D., Dean
Johns Hopkins University School of Medi- cine, Baltimore, Md.	degree	298	76	Alan M. Chesney, M.D., Dean
University of Maryland School of Medicine and Coll. of Phys. and Surgs., Baltimore.	3	359	97	H. Boyd Wylie, M.D., Acting Dean
Boston University School of Medicine, Boston, Mass.	3	247	60	Donald G. Anderson, M.D., Dean
Harvard Medical School, Boston, Mass.	2	492	141	C. Sidney Burwell, M.D., Dean
Massachusetts College Medical School, Boston.	4	410	103	Dwight O'Hara, M.D., Dean
University of Michigan Medical School, Ann Arbor, Mich.	90 sem. hrs.	543	136	Albert C. Furstenberg, M.D., Dean
University of Michigan College of Medicine, Ann Arbor, Mich.	2	252	53	Hardy A. Kemp, M.D., Dean
University of Minnesota Medical School, Minneapolis, Mich.	3	426	126	Harold S. Diehl, M.D., Dean
Louisiana University School of Medicine, St. Louis, Mo.	3	489	124	Alphonse M. Schmittalla, S.J., Ph.D., Dean
Washington University School of Medicine, St. Louis, Mo.	3	361	93	Robert A. Moore, M.D., Acting Dean
University of Nebraska School of Medicine, Omaha, Nebr.	60 sem. hrs.	242	59	Charles M. Wilhelmj, M.D., Dean
University of Nebraska College of Medi- cine, Omaha, Nebr.	3	318	75	Harold C. Lueth, M.D., Dean

Approved Medical Schools in the United States—(cont.)

Name and location of school	1947 premedical requirements by years	Number of students 1945-46	Graduates July 1, 1945 to May 31, 1946	Executive officer
Albany Medical College, Albany, N. Y.	3	180	44	R. S. Cunningham, M.D., Dean
Long Island College of Medicine, Brooklyn, N. Y.	3	411	101	Jean A. Curran, M.D., Pres. and Dean
University of Buffalo School of Medicine, Buffalo, N. Y.	3	306	...	Stockton Kimball, M.D., Dean
Columbia University College of Physicians and Surgeons, New York, N. Y.	3	458	113	Willard C. Rappleye, M.D., Dean
Cornell University Medical College, N. Y. C.	3	315	80	Joseph C. Hinsey, Ph.D., Dean
New York Medical College, Flower and Fifth Avenue Hospitals, New York, N. Y.	3	458	96	J. A. W. Hetrick, M.D., Pres. and Dean
New York Univ., Coll., N. Y. C.	2	517	132	Currier McEwen, M.D., Dean
University of Rochester School of Medicine and Dentistry, Rochester, N. Y.	2	258	65	George H. Whipple, M.D., Dean
Syracuse University College of Medicine, Syracuse, N. Y.	3	192	...	H. G. Weiskotten, M.D., Dean
Duke University School of Medicine, Durham, N. C.	3	282	71	Wilburt C. Davison, M.D., Dean
Bowman Gray School of Medicine of Wake Forest College, Winston-Salem, N. C.	3	190	47	C. C. Carpenter, M.D., Dean
University of Cincinnati College of Medicine, Cincinnati, Ohio	3	322	76	Stanley Dorst, M.D., Dean
Western Reserve University School of Medicine, Cleveland, Ohio	3	328	82	Joseph T. Wearn, M.D., Dean
Ohio State University College of Medicine, Columbus, Ohio	3	311	72	Charles A. Doan, M.D., Dean
University of Oklahoma School of Medicine, Oklahoma City, Okla.	3	281	69	Wann Langston, M.D., Dean
University of Oregon Medical School, Portland, Oreg.	3	282	68	D. W. E. Baird, M.D., Dean
Hahnemann Medical College and Hospital of Philadelphia, Pa.	3	509	125	Charles L. Brown, M.D., Dean
Jefferson Medical College of Philadelphia, Philadelphia, Pa.	2	605	155	William H. Perkins, M.D., Dean
Temple University School of Medicine, Philadelphia, Pa.	3	474	125	William N. Parkinson, M.D., Dean
University of Pennsylvania School of Medicine, Philadelphia, Pa.	3	516	133	Isaac Starr, M.D., Dean
Women's Medical College of Pennsylvania, Philadelphia, Pa.	3	162	36	Marion Fay, Ph.D., Dean
University of Pittsburgh School of Medicine, Pittsburgh, Pa.	2	319	78	William S. McElroy, M.D., Dean
Medical College of the State of South Carolina, Charleston, S. C.	3	205	42	Kenneth M. Lynch, M.D., Dean
University of Tennessee College of Medicine, Memphis, Tenn.	2	443	99	O. W. Hyman, Ph.D., Dean
Meharry Medical College, Nashville, Tenn.	2	232	64	Murray C. Brown, M.D., Dir. of Med. Educ. Michael J. Bent, M.D., Dean
Vanderbilt University School of Medicine, Nashville, Tenn.	3	190	47	Ernest W. Goodpasture, M.D., Dean
Southwestern Medical College of the Southwest'n Med. Foundation, Dallas.	3	203	48	William L. Hart, M.D., Dean
Baylor University College of Medicine, Houston, Tex.	90 sem. hrs.	275	88*	W. H. Moursund, M.D., Dean
University of Texas School of Medicine, Galveston, Tex.	3	358	88	Chauncey D. Leake, Ph. D., Vice Pres.; D. Bailey Calvin, Ph.D., Dean of Students
University of Utah School of Medicine, Salt Lake City, Utah	3	166	38	Richard H. Young, M.D., Dean
University of Vermont College of Medicine, Burlington, Vt.	3	151	37	William Eustis Brown, M.D., Dean
University of Virginia Dept. of Medicine, Charlottesville, Va.	3	257	65	Harvey E. Jordan, Ph.D., Dean
Medical College of Virginia, Richmond, Va.	3	325	89	J. P. Gray, M.D., Dean
University of Wisconsin Medical School, Madison, Wis.	2	266	74	William S. Middleton, M.D., Dean
Marquette University School of Medicine, Milwaukee, Wis.	3	366	164*	Eben J. Carey, M.D., Dean
Totals (students 1945-46; graduates 1945-46)		22,691	5,826	

*Figures are for two graduating classes.

U. S. FRATERNITIES AND SORORITIES

Source: The 1946 Fraternity-Sorority Directory issue of *The Fraternity Month* published by Leland Publishers, Inc., St. Paul, Minnesota.

Fraternities

Honor Societies

Organization	Members	Active chapt.	Date founded	Correspondence address
Commerce: Beta Gamma Sigma...	13,737	48	1913	E. W. Hills, Iowa City, Iowa
Engineering				
Sigma Tau.....	11,597	23	1904	201 S. 30 St., Lincoln, Neb.
Tau Beta Pi.....	42,600	76	1885	U. of Tennessee, Knoxville, Tenn.
Forensic: Tau Kappa Alpha.....	6,500	94	1908	Denison U., Granville, Ohio
Freshmen: Phi Eta Sigma.....	20,959	49	1923	Miami University, Oxford, Ohio
History: Phi Alpha Theta.....	4,100	32	1921	1046 N. 18th St. Allentown, Pa.
Leadership: Omicron Delta Kappa	14,038	52	1914	University of Cincinnati, Cincinnati, Ohio
Legal: Order of the Coif.....	6,000	37	1902	University of Chicago, Chicago, Ill.
Medical: Alpha Omega Alpha.....	16,000	47	1902	55 E. Washington St., Chicago, Ill.
Music: Pi Kappa Lambda*.....	3,000	21	1918	De Pauw University, Greencastle, Ind.
Nursing: Sigma Pi Sigma.....	4,000	38	1921	Pennsylvania State College, State College, Pa.
Premedical				
Alpha Epsilon Delta.....	4,600	33	1936	3853 Lakewood, Detroit, Mich.
Phi Kappa Phi.....	46,745	50	1897	Carnegie Institute of Tech., Pittsburgh, Pa.
Scholarship: Phi Beta Kappa*.....	91,000	147	1776	5 East 44th St., New York
Scientific: Sigma Xi*.....	45,000	93	1886	Yale University, New Haven, Conn

*Men and women.

Professional Fraternities

Organization	Members	Active chapt.	Date founded	Correspondence address
Accounting: Beta Alpha Psi.....	3,980	21	1919	University of Wisconsin, Madison, Wis.
Advertising: Alpha Delta Sigma...	5,796	23	1913	University of Missouri, Columbia, Mo.
Agricultural Ed: Alpha Tau Alpha	2,674	17	1920	University of Illinois, Urbana, Ill.
Architecture				
Alpha Rho Chi.....	2,300	5	1914	University of So. California, Los Angeles, Calif.
Scarab.....	2,428	11	1909	University of Kansas, Lawrence, Kans.
Art: Upsilon Delta Sigma.....		8	1920	4111 W St., N.W., Washington, D. C.
Business Admin.				
Alpha Kappa Psi.....	18,622	48	1904	325 Denver National Building, Denver, Col.
Delta Sigma Pi.....	16,000	48	1907	222 W. Adams St., Chicago, Ill.
Dramatics: Keramos.....	811	6	1902	Missouri School of Mines, Rolla, Mo.
Chemical: Alpha Chi Sigma.....	17,940	44	1902	5503 E. Washington St., Indianapolis, Ind.
Commerce-Journalism				
Epsilon Eta Phi.....	500	4	1927	67 E. Cedar St. Chicago, Ill.
Entistry				
Alpha Omega.....	6,800	31	1907	200 Cranford Place, Teaneck, N. J.
Delta Sigma Delta.....	18,114	32	1882	Route 5, Peru, Ind.
Psi Omega.....	22,000	32	1892	6 N. Michigan Avenue, Chicago, Ill.
Ki Psi Phi.....	15,000	25	1889	1002 Wilson Avenue, Chicago, Ill.
Education				
Kappa Phi Kappa.....	11,500	35	1922	726 Jackson Place, N.W., Washington, D. C.
Phi Delta Kappa.....	33,612	41	1906	2034 Ridge Road, Homewood, Ill.
Phi Epsilon Kappa.....	4,069	18	1913	2437 E. Riverside Drive, Indianapolis, Ind.
Phi Sigma Epsilon.....	3,709	16	1910	606 Union Bank Building, Davenport, Iowa
Phi Sigma Pi.....	3,262	15	1916	A. E. Drumbeller, Indiana, Pa.
Sigma Tau Gamma.....	8,040	28	1920	State Teachers College, Buffalo, N. Y.
Electrical Engineering				
Kappa Eta Kappa.....	1,100	5	1923	5625 Grand Avenue, S., Minneapolis, Minn.
Engineering				
Sigma Phi Delta.....	1,523	6	1924	6415 N. Maplewood Avenue, Chicago, Ill.
Theta Tau.....	9,489	23	1904	Box 244, Reno, Nev.
English: Sigma Tau Delta.....	7,480	70	1924	State Teachers College, Wayne, Neb.
Journalism: Sigma Delta Chi.....	12,736	42	1909	35 E. Wacker Drive, Chicago, Ill.
Legal				
Delta Theta Phi.....	19,200	50	1901	Box 236, Douds, Iowa
Gamma Eta Gamma.....	6,000	20	1901	1821 Munsey Building, Baltimore, Md.
Phi Alpha Delta.....	16,350	48	1902	1706 Connecticut Avenue, Washington, D. C.
Phi Beta Gamma.....	1,450	9	1922	5820 16th Street, N.W., Washington, D. C.
Phi Delta Phi.....	33,518	41	1869	2237 Sixth Street, Boulder, Colo.
Sigma Delta Kappa.....	9,373	26	1914	908 Odd Fellow Building, Indianapolis, Ind.
Sigma Nu Phi.....	3,200	14	1903	1755 Que Street, N.W., Washington, D. C.
Tau Epsilon Rho.....	1,400	13	1919	93 State Street, Albany, N. Y.

Professional Fraternities—(cont.)

Organization	Members	Active chapt.	Date founded	Correspondence address
Mathematical: Pi Mu Epsilon.....	10,128	43	1914	Bucknell University, Lewisburg, Pa.
Medical				
Alpha Kappa Kappa.....	20,839	42	1888	121 S. Sixth Street, Columbus, Ohio
Alpha Mu Pi Omega.....	227	1	1891	Lankenau Hospital, Philadelphia, Pa.
Nu Sigma Nu.....	21,000	41	1882	90 The Highlands, Tuscaloosa, Ala.
Phi Alpha Sigma.....	1,900	4	1888	37 S. 20th Street, Philadelphia, Pa.
Phi Beta Pi.....	17,404	40	1891	Box 722, Morgantown, W. Va.
Phi Chi.....	28,841	65	1889	103 W. Brookwood Drive, Valdosta, Ga.
Phi Delta Epsilon.....	8,500	47	1904	39 W. 55th Street, New York, N. Y.
Phi Lambda Kappa.....	3,400	20	1907	401 Wood Street, Pittsburgh, Pa.
Phi Rho Sigma.....	16,896	18	1890	10515 Carnegie Avenue, Cleveland, Ohio
Theta Kappa Psi.....	8,660	19	1879	4713 Lackawanna Street, Berwyn, Md.
Music: Phi Mu Alpha.....	11,000	70	1898	64 E. Jackson Boulevard, Chicago, Ill.
Optometrical				
Omega Delta.....	2,980	7	1919	761 E. 75th St., Chicago, Ill.
Omega Epsilon Phi.....	900	7	1919	4405 13th Avenue, Brooklyn, N. Y.
Phi Delta Chi.....	7,500	15	1883	3134 N. High Street, Columbus, Ohio
Osteopathic				
Psi Sigma Alpha.....	337	3	1924	142 W. Fifth Street, East Liverpool, Ohio
Sigma Sigma Phi.....	939	5	1921	252 W. 10th Street, Erie, Pa.
Pharmaceutical: Kappa Psi.....	12,500	50	1879	179 Longwood Avenue, Boston, Mass.
Scientific: Chi Beta Phi.....	3,000	20	1916	92 Woodland Park Drive, Tenafly, N. J.
Veterinary: Alpha Psi.....	4,500	7	1906	39th and Woodland Avenue, Philadelphia, Pa.

Social Fraternities

Organization	Members	Active chapt.	Date founded	Correspondence address
Acacia.....	12,369	27	1904	7001 N. Clark St., Chicago, Ill.
Alpha Chi Rho.....	6,559	18	1895	225 Lafayette St., New York, N. Y.
Alpha Delta Phi.....	21,400	27	1832	347 Madison Avenue, New York, N. Y.
Alpha Epsilon Pi.....	4,600	25	1913	4 N. Eighth St., St. Louis, Mo.
Alpha Gamma Rho.....	11,123	31	1904	20 N. Wacker Drive, Chicago, Ill.
Alpha Kappa Lambda.....	2,104	5	1914	711 Meridian, West Lafayette, Ind.
Alpha Kappa Pi.....	4,075	29	1921	Box 706, Bluefield, W. Va.
Alpha Lambda Tau.....	2,870	11	1916	136 Marietta St. N. W., Atlanta, Ga.
Alpha Phi Delta.....	3,631	10	1914	32 Eliot Rd., Arlington, Mass.
Alpha Sigma Phi.....	14,000	28	1845	42 Broadway, New York, N. Y.
Alpha Tau Omega.....	44,975	95	1865	627-29 E. Green St., Champaign, Ill.
Beta Sigma Rho.....	1,900	9	1910	21 E. 49th St., New York, N. Y.
Beta Theta Pi.....	53,093	90	1839	Box 787, Salem, Ore.
Chi Phi.....	16,659	33	1824	320 Connally Bldg., Atlanta, Ga.
Chi Psi.....	13,625	24	1841	1705 Washtenaw Ave., Ann Arbor, Mich.
Delta Chi.....	13,500	37	1890	16 S. Clinton St., Iowa City, Iowa
Delta Kappa Epsilon.....	27,470	47	1844	Yale Club, 50 Vanderbilt Ave., New York, N. Y.
Delta Phi.....	6,000	15	1827	15 William St., New York, N. Y.
Delta Psi.....	3,450	9	1847	270 Park Avenue, New York
Delta Sigma Phi.....	12,912	40	1899	218 Woolworth Building, Springfield, Ohio
Delta Tau Delta.....	37,953	75	1859	333 N. Pennsylvania St., Indianapolis, Ind.
Delta Upsilon.....	26,000	61	1834	271 Madison Avenue, New York, N. Y.
Farmhouse.....	2,625	8	1905	Pennsylvania State College, State College, Pa.
Gamma Delta.....	1,200	50	1934	77 W. Washington, St., Chicago, Ill.
Gamma Iota Alpha.....			1943	85 Livingston St., Brooklyn, N. Y.
Kappa Alpha Order.....	30,000	50	1865	303 Martin Brown Bldg., Louisville, Ky.
Kappa Alpha Society.....	2,574	8	1825	522 Fifth Avenue, New York, N. Y.
Kappa Delta Rho.....	4,500	17	1905	443 Grove Street, Rahway, N. J.
Kappa Nu.....	3,500	13	1911	140 Chambers Street, New York, N. Y.
Kappa Sigma.....	51,865	110	1869	Box 150, Carmel, California
Lambda Chi Alpha.....	35,000	110	1909	2029 N. Meridian Street, Indianapolis, Ind.
Phi Alpha.....	4,183	21	1914	608 Court Square Building, Baltimore, Md.
Phi Delta Theta.....	61,011	105	1848	2 S. Campus Avenue, Oxford, Ohio
Phi Epsilon Pi.....	6,780	31	1904	520 Lewis Tower, Philadelphia, Pa.
Phi Gamma Delta.....	40,500	74	1848	1001 15th St., N. W., Washington, D. C.
Phi Kappa.....	6,205	21	1889	435 Commercial Square, Cincinnati, Ohio
Phi Kappa Psi.....	32,235	50	1852	1940 E. Sixth Street, Cleveland, Ohio
Phi Kappa Sigma.....	14,100	39	1850	1500 Locust Street, Philadelphia, Pa.
Phi Kappa Tau.....	12,109	43	1906	R. J. Young, Oxford, Ohio
Phi Mu Delta.....	4,580	11	1918	M. W. Roberts, Alfred, Maine
Phi Sigma Delta.....	4,200	19	1909	47 W. 43d Street, New York, N. Y.
Phi Sigma Kappa.....	18,575	20	1873	10 S. LaSalle Street, Chicago, Ill.
Pi Kappa Alpha.....	30,910	77	1868	771 Spring Street, Atlanta, Ga.

Social Fraternities—(cont.)

Organization	Members	Active chapt.	Date founded	Correspondence address
Kappa Phi.....	10,022	31	1904	401 E. Franklin Street, Richmond, Va.
Lambda Phi.....	7,500	35	1895	1440 Broadway, New York, N. Y.
Upsilon.....	14,800	28	1833	420 Lexington Avenue, New York, N. Y.
Alpha Epsilon.....	61,138	114	1856	Box 1856, Evanston, Ill.
Alpha Mu.....	8,000	34	1909	100 W. 42nd Street, New York, N. Y.
Chi.....	50,000	103	1855	35 E. Wacker Drive, Chicago, Ill.
Nu.....	46,455	98	1869	745 Illinois Building, Indianapolis, Ind.
Phi.....	2,800	10	1827	149 Broadway, New York, N. Y.
Phi Epsilon.....	25,988	70	1901	518 W. Franklin Street, Richmond, Va.
Phi Sigma.....	5,200	6	1908	290 North Street, Buffalo, N. Y.
Pi.....	8,709	26	1897	1137 E. Jersey St., Elizabeth, N. J.
Tau Phi.....	2,000	7	1917	4632 Sansom Street, Philadelphia, Pa.
Theta and Compass.....	4,300	38	1917	Box 157, Grand Central Station, New York, N. Y.
Delta Phi.....	4,700	18	1910	7 E. 42nd Street, New York, N. Y.
Epsilon Phi.....	5,442	26	1910	627 W. 115th Street, New York, N. Y.
Kappa Epsilon.....	10,364	21	1899	631 E. Green Street, Champaign, Ill.
Chi.....	25,268	69	1856	435 Broad Street, Trenton, N. J.
Delta Chi.....	15,530	28	1847	665 Fifth Avenue, New York, N. Y.
Kappa Phi.....	4,320	17	1919	Catholic University, Washington, D. C.
Xi.....	13,193	35	1864	5473 Delmar Boulevard, St. Louis, Mo.
Omega.....	4,800	17	1907	1938 Northcutt Avenue, Cincinnati, Ohio
Beta Tau.....	8,554	35	1898	45 West 45th Street, New York, N. Y.
Psi.....	12,649	29	1847	31 East 39th Street, New York, N. Y.

Sororities

Honor Societies

Organization	Members	Active chapt.	Date founded	Correspondence address
Medical: Iota Sigma Pi.....	3,000	19	1900	Vassar College, Poughkeepsie, N. Y.
Human: Alpha Lambda Delta.....	.....	49	1924	Southern Methodist University, Dallas, Tex.
Economics: Omicron Nu.....	10,235	34	1912	Rensselaer Hall, Cornell University, Ithaca, N. Y.
Literary: Chi Delta Phi.....	1,002	25	1919	132 N. Yorktown, Tulsa, Okla.
Leadership: Mortar Board.....	15,300	78	1918	1213 Wakening Street, Philadelphia, Pa.
Medical: Alpha Epsilon Iota.....	2,627	21	1890	963 Payne Avenue, St. Paul, Minn.
Singing: Sigma Theta Tau.....	.....	5	1922	Indiana University, Indianapolis, Ind.
Scientific: Sigma Delta Epsilon.....	3,000	15	1921	1086 N. Broadway, Yonkers, N. Y.
Art Service: Phi Kappa Theta.....	531	5	1926	5746 Venice Boulevard, Los Angeles, Calif.

Professional Sororities

Organization	Members	Active chapt.	Date founded	Correspondence address
Advertising: Gamma Alpha Chi.....	1,065	7	1920	973 Hilyard, Eugene, Ore.
Architecture: Alpha Alpha Gamma.....	500	7	1922	6659 Kingsbury, University City, Mo.
Sigma Lambda.....	.....	...	1923	1805 Rutledge Street, Madison, Wis.
Commerce.....	.....	.....	.....	.....
Chi Theta.....	920	25	1924	718 Judah Street, San Francisco, Calif.
Gamma Nu.....	1,500	9	1924	2545 N. Broad Street, Philadelphia, Pa.
Industry: Upsilon Alpha.....	3,120	8	1918	16408 S. Western Avenue, Moneta, Calif.
Omega Upsilon.....	2,000	5	1904	1509 Burlingame Avenue, Detroit, Mich.
Education.....	.....	.....	.....	.....
Phi Sigma Alpha.....	8,701	28	1901	1405 Hardy Avenue, Independence, Mo.
Phi Sigma Tau.....	3,783	18	1899	481 Torrence Road, Columbus, Ohio
Phi Sigma Epsilon.....	8,300	36	1914	Box 333, Warrensburg, Mo.
Phi Delta Epsilon.....	2,004	11	1933	Illinois Normal University, Normal, Ill.
Kappa Sigma.....	9,200	27	1894	1503 First National Bank Bldg., Cincinnati, Ohio
Lambda Theta.....	21,992	39	1917	405 Hilyard Ave., Los Angeles, California
Gamma Sigma Sigma.....	10,743	39	1898	Drawer 108, Clermont, Fla.
Beta Sigma Upsilon.....	3,200	16	1921	900 W. Congress Street, Tucson, Ariz.
Arts: Phi Mu Gamma.....	5,200	6	1898	3921 Ingersoll Avenue, Des Moines, Iowa
State: Phi Delta Gamma.....	1,440	10	1923	1287 Bryden Road, Columbus, Ohio
Economics.....	.....	.....	.....	.....
Upsilon Omicron.....	7,500	30	1909	Mrs. D. M. Risley, Powell, Ohio
Phi Omicron Phi.....	2,251	20	1922	1539 Lakeside, North Chicago, Ill.
Alism: Theta Sigma Phi.....	8,800	43	1909	1405 Jarvis Avenue, Chicago, Ill.
Tau Tau.....	.....	...	1925	83 Drake Ct., Omaha, Neb.
Phi Beta Pi.....	2,868	25	1908	First National Bank Bldg., Independence, Mo.
Delta Delta.....	2,042	42	1911	6015 Manistique, Detroit, Mich.

Professional Sororities—(cont.)

Organization	Members	Active chapt.	Date founded	Correspondence address
Med. Technology: Alpha Delta Theta Music	228	4	1944	Milwaukee County Hospital, Wauwatosa, Wis.
Delta Omicron	3,800	32	1909	28A Weissinger-Gaulbert Apts., Louisville, Ky.
Mu Phi Epsilon	15,000	51	1903	222 Nickels Arcade, Ann Arbor, Mich.
Sigma Alpha Iota	16,000	77	1903	3741 Purdue, Dallas, Tex.
Music and Speech: Phi Beta	5,000	21	1912	2218 Union Blvd. S. E., Grand Rapids, Mich.
Pharmaceutical				
Lambda Kappa Sigma	1,445	21	1913	501 High Street, Pullman, Wash.
Physical Education				
Delta Psi Kappa	2,600	12	1916	4649 Glenway Avenue, Cincinnati, Ohio
Phi Delta Pi	3,000	8	1916	321 E. 22nd Street, Chester, Pa.
Speech Arts: Zeta Phi Eta	4,200	24	1893	1227 Maple Avenue, Evanston, Ill.

Social Sororities

Organization	Members	Active chapt.	Date founded	Correspondence address
Alpha Chi Omega	24,238	66	1885	Chamber of Commerce Bldg., Indianapolis, Ind.
Alpha Delta Pi	21,600	62	1851	3074 Claremont Avenue, Berkeley, Calif.
Alpha Epsilon Phi	6,491	31	1909	2116 Octavia, New Orleans, La.
Alpha Gamma Delta	18,000	49	1904	150 Claremont Avenue, New York, N. Y.
Alpha Omicron Pi	13,750	41	1897	17½ E. High Street, Oxford, Ohio
Alpha Phi	15,000	36	1872	3310 Eaton Tower, Detroit, Mich.
Alpha Xi Delta	18,500	58	1893	840 North Michigan Avenue, Chicago, Ill.
Beta Sigma Omicron	6,750	11	1888	Box 1296, Chicago, Ill.
Chi Omega	33,132	97	1895	26 Cooper Building, Cincinnati, Ohio
Delta Delta Delta	37,736	87	1888	Daily News Building, Chicago, Ill.
Delta Gamma	24,700	60	1874	A. I. U. Tower, Columbus, Ohio
Delta Phi Epsilon	1,738	16	1917	Room 663, 44 West 42nd Street, New York, N. Y.
Delta Zeta	14,760	56	1902	1325 Circle Tower, Indianapolis, Ind.
Gamma Phi Beta	19,500	48	1874	20 N. Wacker Drive, Chicago, Ill.
Iota Alpha Pi	1,600	15	1901	2550 30th Road, Long Island, City, N. Y.
Kappa Alpha Theta	32,856	67	1870	20 N. Wacker Drive, Chicago, Ill.
Kappa Delta	23,121	69	1897	900 Landers Building, Springfield, Mo.
Kappa Kappa Gamma	37,879	74	1870	Ohio State Savings Bldg., Columbus, Ohio
Phi Mu	20,000	59	1852	708 Church Street, Evanston, Ill.
Phi Omega Pi	5,830	14	1910	348a 14th Street, Brooklyn, N. Y.
Phi Sigma Sigma	3,300	21	1913	163 Eastern Parkway, Brooklyn, N. Y.
Pi Beta Phi	42,388	90	1867	206 National Bank Bldg., Decatur, Ill.
Pi Lambda Sigma	670	6	1921	353 Main Street, Nashua, N. H.
Sigma Delta Tau	3,100	19	1917	1612 Orrington Avenue, Evanston, Ill.
Sigma Kappa	14,428	41	1874	129 E. Market Bldg., Indianapolis, Ind.
Theta Phi Alpha	3,199	14	1912	802 W. Prospect, Appleton, Wis.
Theta Upsilon	5,235	17	1914	110 N. 87th Street, Wauwatosa, Wis.
Zeta Tau Alpha	19,000	62	1898	708 Church Street, Evanston, Ill.

Recognition Societies

Organization	Members	Active chapt.	Date founded	Correspondence address
Activity: Iota Sigma	4,000	28	1924	Col. C. R. Morse, Camp Campbell, Ky.
Agricultural				
Alpha Zeta		45	1897	College of Agriculture, Urbana, Ill.
Gamma Sigma Delta	6,164	11	1905	Ohio State University, Columbus, Ohio
Architecture: Tau Sigma Delta	1,420	9	1913	14424 Longacre Road, Detroit, Mich.
Art				
Delta Phi Delta	4,002	30	1912	73 E. Cedar Street, Chicago, Ill.
Kappa Phi	2,615	23	1911	Mississippi State College, Columbus, Miss.
Athletic: Sigma Delta Psi	3,560	69	1912	University of Minnesota, Minneapolis, Minn.
Biological				
Beta Beta Beta	5,064	49	1922	Cornell College, Mt. Vernon, Iowa
Phi Sigma	12,400	30	1915	University of Oklahoma, Norman, Okla.
Chemistry				
Gamma Sigma Epsilon	2,000	15	1919	University of Alabama, University, Ala.
Phi Lambda Upsilon	13,072	39	1899	532 Drake Avenue, Roselle, N. J.
Civil Engineering: Chi Epsilon	3,500	20	1922	University of Wisconsin, Madison, Wis.
Dentistry				
Omicron Kappa Upsilon	5,550	36	1914	311 E. Chicago Avenue, Chicago, Ill.
Sigma Epsilon Delta	1,050	5	1901	294 New York Avenue, Brooklyn, N. Y.

Organization	Members	Active chapt.	Date founded	Correspondence address
Alpha Psi Omega	11,655	215	1925	Box 347, Fairmont, W. Va.
National Collegiate Players		40	1922	Earlham College, Richmond, Ind.
Theta Alpha Phi	11,964	55	1919	Pennsylvania State College, State College, Pa.
Education: Kappa Delta Pi	60,414	134	1909	Heidelberg College, Tiffin, Ohio
Electrical Eng.: Eta Kappa Nu	10,056	37	1924	P. O. Drawer C, Dillsburg, Pa.
Physics				
Delta Sigma Rho	11,000	70	1906	Northwestern University, Evanston, Ill.
Pi Kappa Delta	20,578	173	1913	1739 Fairacres Drive, Greeley, Colo.
Forestry: Xi Sigma Pi	2,300	15	1908	University of Minnesota, St. Paul, Minn.
General: Blue Key	19,560	78	1924	Box 488, Gainesville, Fla.
Biology: Sigma Gamma Epsilon	4,750	31	1915	1809 Ford Street, Golden, Colo.
German: Delta Phi Alpha	3,500	46	1929	University of Cincinnati, Cincinnati, Ohio
Journalism				
Alpha Delta	536	9	1929	403 N. Green Street, Gainesville, Ga.
Kappa Tau Alpha	1,540	17	1910	University of Missouri, Columbia, Mo.
Pi Delta Epsilon		47	1909	5738 Howe Street, Pittsburgh, Pa.
Mathematical: Kappa Mu Epsilon	4,605	31	1931	University of New Mexico, Albuquerque, N. Mex.
Mechanical Engineering				
Pi Tau Sigma	5,840	34	1915	University of Kansas, Lawrence, Kans.
Literary: Scabbard and Blade	45,000	89	1905	705 N. Main Street, W. Lafayette, Ind.
Music: Kappa Kappa Psi		43	1919	W. T. Jones, Lowell, Ind.
Metrical: Beta Sigma Kappa	467	10	1925	75 Elmwood Drive, Highland Park, Ill.
Pharmaceutical: Alpha Zeta Omega	1,000	14	1919	9208 Yale Avenue, Cleveland, Ohio
Physical Science				
Lambda Delta Lambda	1,171	13	1925	206 Naomi, Fairmont, W. Va.
Political Science: Pi Sigma Alpha	4,800	32	1919	400 Investment Building, Washington, D. C.
Psychology: Psi Chi	6,594	37	1929	6342 Carnation Street, Philadelphia, Pa.
Radio: Alpha Epsilon Rho	291	8	1941	University of Oklahoma, Norman, Okla.
Foreign Languages				
Pi Sigma Iota	6,000	35	1922	Beloit College, Beloit, Wis.
Scholarship				
Alpha Chi	10,000	30	1915	State Teachers College, San Marcos, Tex.
Delta Epsilon Sigma	1,600	52	1939	1204 State Street, Osage, Iowa
Scientific				
Gamma Alpha		14	1899	Cornell University, Ithaca, N. Y.
Sigma Zeta	175	12	1925	Central State Teachers College, Stevens Pt., Wis.
Service: Alpha Phi Omega	12,000	102	1925	407 Land Bank Bldg., Kansas City, Mo.
Spanish: Sigma Delta Pi		50	1919	Hofstra College, Hempstead, N. Y.
Social Science: Pi Gamma Mu	30,000	128	1924	1414 E. Fourth Avenue, Winfield, Kans.
Geology: Theta Phi	300	6	1933	150 Fifth Avenue, New York, N. Y.

Educational Reorganization in U. S.

Source: Encyclopaedia Britannica.

Since about 1910, a very important reorganization of the upper years of the public school systems in the United States has taken place. Instead of the traditional educational organization consisting of eight years of elementary school and four years of secondary school, there has been evolved a six-year elementary school dealing with the fundamental tools and skills, a three-year junior high school with a greatly enriched course of study designed to meet the special biological and psychological and social needs of the young people in their teens, and a three-year senior high school planned for later adolescents. This has substituted a 6-3-3 type of educational organization for the former 8-4 type.

Few fundamental changes in educational organization have been accepted more widely than this; whereas but two cities had organized junior high schools before 1910, and but ten cities before 1910, 198 cities had organized such schools by 1915, 744 cities by 1920, 704 cities by 1924 and

1,109 cities by 1927, hundreds more since.

Another administrative reorganization, and one of great importance to the future of public education in America, is the extension upward of the public school system to include the 13th and 14th years of school life—the freshman and sophomore years of the traditional college. A number of American cities have added these years to their public school system by organizing what has come to be known as the junior college, thus making their public school system a 6-3-3-2 school system.

The final result of such a reorganization will be not only a kindergarten 6-3-3-2 school system, or possibly a kindergarten 6-4-4 plan of organization, but also the dropping of the first two years of work from the traditional college and the transformation of the universities of America into what continental European universities have for long been—a group of professional schools beginning with the junior year.

MUSEUMS in the United States

Art Museums

Albright Art Gallery: 1285 Elmwood Ave., Buffalo 9, N. Y.; Sundays and Mondays, 2 to 6 P. M., other days 10 A. M. to 5 P. M.

Sculpture court, portrait gallery, small sculptures and ceramics 2000 B. C. to 18th century, American painting of 18th and 19th centuries, French paintings of 19th century, religious arts, contemporary art. Library—8,000 vols.

American Academy of Arts and Letters: 633 W. 155th St., New York, N. Y.; exhibitions daily 2 to 5 P. M. except Monday—Spring, May 16 to July 25—Fall, November to February 1948.

Permanent collection of painting and sculpture by members of Academy.

Art Institute of Chicago: Michigan Avenue at Adams, Chicago 3, Ill.; daily 9 A. M. to 5 P. M., Sunday Noon to 5 P. M.; Fee thirty cents, free on Wed., Sat., Sun., Holidays.

World famous paintings and water colors ranging from earliest religious subjects of 13th century to most abstract in modern art. The 19th and 20th century French collection is greatest in the world. Fifty thousand original prints and drawings. Thorne Miniature Rooms. Ryerson Library (art) 40,000 vols., Burnham Library—(architecture) 9,200 vols.

Berkshire Museum: Pittsfield, Mass.; daily 10 A. M. to 5 P. M., Sunday 2 to 5 P. M., closed Mondays.

Original sculpture, painting, objects from Egyptian to modern times; science includes mounted displays, Indian and Eskimo exhibits; historical includes original "One Horse Shay". Special exhibitions of local and national interest.

Brooklyn Museum: Eastern Parkway, Brooklyn 17, N. Y.; daily 10 A. M. to 5 P. M., Sundays and holidays 1 to 5 P. M.

Egyptian, American painting, costume, American rooms, pre-Columbian and American Indian collections. Noted for quality of art, concerts, and other programs of the Education division.

California Palace of the Legion of Honor: Lincoln Park, San Francisco, Calif.; every day 10 A. M. to 5 P. M.

European examples from 14th to 19th century, representative collection of American paintings of the 18th, 19th and 20th centuries, decorative arts of the French 18th century, collections of works of Rodin.

Carnegie Museum: Schenley Park, Pittsburgh, Pa.; daily.

Modern painting and sculpture, only international exhibition of paintings in

the world; exhibitions covering natural sciences and applied arts.

Cincinnati Art Museum: Eden Park, Cincinnati 6, Ohio; daily 10 A. M. to 5 P. M. Sundays and holidays 2 to 5 P. M.

Old and modern paintings, Old Master prints, Meissen porcelain, Nabataean antiquities, Cincinnati interiors of 1800's, American Indian. Library—15,000 vols.

City Art Museum of St. Louis: Forest Park St. Louis, Mo.; daily 10 A. M. to 5 P. M. except Monday, 2:30 P. M. to 9:30 P. M.

Two loan exhibitions monthly, largest collection paintings by Bingham, permanent collection 10,000 pieces of all periods, armor, oriental rugs, textiles Chinese and Japanese art.

Cleveland Museum of Art: Fine Arts Garden, Cleveland 6, Ohio; daily except Monday, 9 A. M. to 5 P. M., Wednesday to 10 P. M.

All forms and periods of all peoples, classical, medieval, modern, oriental, occidental, decorative. Annual exhibition of work of Cleveland artists and craftsmen.

Corcoran Gallery of Art: 17th and New York Avenue, Washington 6, D. C.; Mondays from Noon to 4:30 P. M., Tuesday through Saturday 9 A. M. to 4:30 P. M. Sunday 2 to 5 P. M.

Representative American art, casts from the antique and Renaissance, originals in marble and bronze includes 100 originals by Antoine Barye; paintings by Vanni, Perugino, Titian, Van Cleve, Rubens, Van Dyck, Rembrandt, Hals, Hobbema, Van Goyen, Chardin, Barbizon School, Degas, Carbo; collections of Persian rugs and Ispahans, tapestries etc.

Currier Gallery of Art: 192 Orange St. Manchester, N. H.; daily 10 A. M. to 5 P. M. Sundays 2 to 5 P. M.

Permanent collection of early American textiles, silver, glass, wallpaper by Du four; Tournai tapestry "Visit of the Gypsies" (circa 1490); Audubon prints "Madonna and Child" by Rossellino "Virgin and Child" by da Malano; paintings by 19th and 20th century painters.

Denver Art Museum: Denver Civic Center, Colo.; Mondays 1 to 5 P. M. and 7 to 9 P. M. Sundays 2 to 5 P. M., all other days 9 to 5 P. M.

European and American painting, sculpture, prints, 970 items; decorative arts 5,200 items; Oriental, 1,600 items; American Indian, 10,000 items; Bayly Jr. bull fight collection of 400 prints, paraphernalia, etc.

San Diego Art Society (Gallery) of San Diego: Balboa Park, San Diego, Calif.; daily except Monday 10:30 A. M. to 5 P. M., Sunday 1 to 5:30 P. M.; Sat. 9 A. M. to 5 P. M. Sponsors and exhibits contemporary and late American arts; collection of Old Masters and medievais; Orientals; old and contemporary Spanish.

Metropolitan Museum of Art: 1 East 70th St., New York N. Y.; daily 10 A. M. to 5 P. M. except Mondays, 1 to 5 P. M. Sundays.

14th to 19th century paintings, fine examples of Western European masters, suites of Boucher and Fragonard decorations; 15th to 19th century prints; 15th to 18th century sculpture; 16th century enameled enamels; 17th to 18th century Chinese and French porcelains; period furniture.

Henry E. Huntington Library and Art Gallery: San Marino 15, Calif.; every day except Monday 1 to 4:30 P. M., closed month of October.

Library collections center on English and American history and literature, including group of 5400 incunabula. Rare volumes number 150,000, manuscripts over one million vols. Permanent exhibition features Gutenberg Bible, the Ellesmere manuscript of Chaucer's Canterbury Tales (circa 1400), Benjamin Franklin's Autobiography in his own script. Botanical Gardens with 50,000 are tropical and sub-tropical plants is noted for 1200 varieties of cacti.

Hispanic Society of America (Spanish Museum and Library): 156th St. west of Madison, New York 32, N. Y.; daily 10 A. M. to 4:30 P. M., Sunday 1 to 4:30 P. M., Monday 1 to 4:30 P. M. daily except Sunday, Monday and holidays.

Representatives of Spanish culture from prehistoric days to present include paintings, sculpture, ceramics, metalwork, furniture, textiles, and other works. Library contains material on history, literature, and art of Spain and Portugal.

Indiana Herron Art Institute: Pennsylvania Sixteenth Streets, Indianapolis, Indiana; daily except Mondays 9 A. M. to 5 P. M., Sundays 1 to 6 P. M.

Open galleries exhibiting paintings, sculptures, prints, ceramics of Asia, Africa, Europe and America.

John H. Vanderpoel Memorial Art Gallery: Greenwood Drive at 96th, Chicago 43, Ill.; daily 9 A. M. to 5 P. M. except holidays.

Excellent collection of all phases presented for the layman and the critic.

Wisconsin Art Gallery: 758 N. Jefferson St., Milwaukee 2, Wis.; daily 9 A. M. to 5 P. M., days 2 to 5 P. M.

Exhibitions, gallery talks and lectures, professional art school four years. Contemporary artists and craftsmen.

Los Angeles County Museum of History, Science and Art: Exposition Park, Los Angeles 7, Calif.; daily—Sundays, Mondays and holidays 1 to 5 P. M., Tuesday through Saturday 10 A. M. to 5 P. M.

Fine and Decorative Arts—Old Masters, modern French, contemporary American paintings, water colors, medieval stained glass, early American silver, glass, furniture, textiles; History and Anthropology—American Indian, Egyptian, African, South Seas, development of transportation, history of motion pictures; Science—Rancho La Brea fossils, African and North American animal habitat groups.

Metropolitan Museum of Art: Central Park, 82nd St. and 5th Avenue, New York 28, N. Y.; daily 10 A. M. to 5 P. M., Sunday 1 to 5 P. M.

Lending collection of lantern slides, color prints, etc., for teaching aids; reference library of 100,000 volumes on art and archaeology—also 200,000 photographs. Junior museum for children. Costume Institute includes 7,000 articles of dress of three centuries and reference materials in books, prints, etc. Cloisters: mediaeval art and architecture. Art collections: Egyptian—most extensive in the U. S.; Far Eastern, outstanding group of Chinese sculpture and early ceremonial bronzes including examples of Chinese and Japanese decorative arts. Near Eastern include Syrian mosque lamps, 13th and 14th century enameled glass, a 14th century Iranian prayer niche, Persian and Indian manuscripts and miniature paintings, Indian and Tibetan jewelry, rugs and pottery. Americana collection devoted to development of American decorative arts from 17th to first quarter of 19th century. European, Near East, Chinese and Japanese arms and armor. Paintings includes oils, pastels, water colors numbering 2500 representing all schools. Representative American artists of 18th and 19th centuries. Large group of European Old Masters. Seven special collections of European, Oriental and American arts and decorative arts, including the Georges Hoentschel collection of Paris.

Mint Museum of Art: Charlotte, North Carolina; daily except Monday, 10 A. M. to 5 P. M., Sunday from 3 to 5 P. M.

Very fine collection of European and American masters. Confederate relic room.

Museum of Fine Arts: Boston 15, Mass.; daily except Monday from 9 A. M. to 5 P. M., Sunday from 1:30 to 5:30 P. M.

Most extensive collection of Chinese and Japanese painting and sculpture in the Occident; Egyptian collection most distinguished outside of Cairo (did own excavations at Gizeh on Old Kingdom site). Greek archaic and 4th century works;

decorative includes everything except drawing and prints; noted for Colonial and early Republica period rooms, furniture and silver; large textile display; and representative collection of European and Colonial paintings.

Museum of Modern Art: 53d St., W. of 5th Ave., New York; daily noon to 7 P. M., Thursdays noon to 10 P. M., Sundays and holidays 1 to 7 P. M. Fee thirty cents.

Constantly changing exhibitions of contemporary painting and sculpture and masterpieces featuring Cézanne, Van Gogh, Seurat, Gauguin. Film library preserves significant examples of all types of motion pictures since 1895.

Museum of Navajo Ceremonial Art: Camino Lejo, near Old Pecos Road, two miles southeast of Sante Fe plaza; daily except Monday and holidays 9 A. M. to 12 M., and 1 to 4:30 P. M.—fee 25 cents; Sundays free 1 to 5 P. M.

Features Navajo architecture and extraordinary Navajo sand paintings.

National Academy of Design: 1083 Fifth Avenue., New York 28, N. Y.; every day 1 to 5 P. M. Fee 25 cents.

Membership exclusively of artists, painters, sculptors, architects, workers in the graphic arts and aquarellists. Women eligible. When member is elected Associate he presents diploma portrait; when Associate become an Academician, he presents original work of art. Art collection is valuable record of development of American art and architecture.

National Gallery of Art (Smithsonian Institution): Washington 25, D. C.; daily 10 A. M. to 5 P. M., Sunday 2 to 10 P. M.

Paintings representative of Italian, Flemish, Dutch, Spanish, French, English and American schools. Two galleries devoted to 19th century paintings exclusively. French and Italian sculptures. More than 10,000 examples of prints and drawings.

Newark Museum: 49 Washington St., Newark 2, N. J.; daily Noon to 5:30 P. M., Wed. and Thurs. eves 7 to 9:30 P. M., Sunday 2 to 6 P. M.

General collections of arts, science, archaeological and ethnological material. Pioneering in labeling of exhibitions and simple presentations to the public.

Pennsylvania Academy of the Fine Arts: Broad and Cherry Sts., Philadelphia, Pa.; daily except Monday 10 A. M. to 5 P. M., Sunday and holidays 1 to 5 P. M.

Permanent collection of early American paintings and sculptures. Academy is the oldest art institution in the U. S.

Philadelphia Museum of Art: Parkway at 26th St., Philadelphia, Pa.; daily and Sunday 9:30 A. M. to 5 P. M.

Art from beginning of Christian Era in West and East. Middle Ages, Renaissance, Modern in Europe and America. Near East, Persia, India, China. Paintings (1500), prints, decorative arts, architectural units of all countries.

Ringling Museum of Art (The John and Mable Ringling): Sarasota, Florida, on the Tamiami Trail; daily 9 A. M. to 4:30 P. M. Fee thirty cents.

Paintings, mostly Baroque, 18th century French and Italian and a few German and Flemish of the 15th and 16th centuries.

San Francisco Museum of Art: War Memorial, Civic Center, San Francisco 2, Calif.; weekdays Noon to 10 P. M., Saturdays to 9 P. M., Sundays 1 to 5 P. M.

Frequent exhibitions of contemporary art, some emphasis on Latin-American contemporary art, and the creative developing tendencies of present time. Special emphasis on interpreting visual arts.

Virginia Museum of Fine Arts: Grove Avenue and Boulevard, Richmond 20, Va.; Tues. Thurs., Fridays, Sats. 9:30 A. M. to 5 P. M., Wed. 2 to 10 P. M., Sunday 2 to 5:30 P. M. Fee 25 cents on Tuesday, Thursday and Friday. Other days free.

Collections range from ancient Egyptian to contemporary works.

Walters Art Gallery: Baltimore 1, Md.; daily 11 A. M. to 5 P. M., Sunday and holidays 2 to 5 P. M.

Complete representation of all phases of art and art groups.

Whitney Museum of American Art: 10 West 8th St., New York, N. Y.; daily except Monday, 1 to 5 P. M.

Collection includes paintings, sculptures, water colors and prints by American artists. Holds annual exhibitions of contemporary American art.

William Rockhill Nelson Gallery of Art: Rockhill Road at 45th St., Kansas City, Mo.; daily except Monday 10 A. M. to 5 P. M. Fee 25 cents except Sat. Sun. and holidays.

Permanent collection is outstanding in the Chinese field. Building and installation regarded as outstanding museum achievement.

Worcester Art Museum: 55 Salisbury Street, Worcester 2, Mass.; daily 10 A. M. to 5 P. M., Sunday from 2 to 6 P. M.

Primary emphasis is on painting and sculpture. Well balanced display of all groups and outstanding of early Christian and American Colonial.

The word "museum" is much older than the thing which it now denotes. Its original meaning is "a temple of the Muses." It could be applied metaphorically to any place where literature and the arts were cultivated.

Science Museums

Academy of Natural Sciences of Philadelphia: 19th St. and the Parkway, Philadelphia, Pa.; daily 9 A. M. to 5 P. M., Sunday to 5 P. M.

Habitat groups of North American, African and Asiatic mammals; exhibits of birds, minerals, and gems as well as earth history. Library—140,000 volumes.

Alabama Museum of Natural History: University of Alabama, Tuscaloosa, Ala.; every day 8 A. M. to 5 P. M.

All fields of natural history with special emphasis on geological exhibits. Also operates Archaeological Museum on an Indian site containing 35 prehistoric Indian mounds. Fee 25 cents.

American Geographical Society: Broadway 156th St., New York 32, N. Y.; daily except Sunday, 9 A. M. to 5 P. M. Contributing memberships.

Library 116,500 vols. and 23,000 pamphlets; map collection—133,300 maps, 2,200 atlases, 29,000 photographs and 2,000 slides. Published "The Geographical Review" and "Current Geographical Publications" (bibliography), and some 70 books in series. Devoted to advancement of geography in its scientific and cultural aspects.

American Museum of Natural History: Central Park West at 79th St., New York 24, N. Y.; daily 10 A. M. to 5 P. M., Sundays and holidays 1 to 5 P. M.

Covers all branches of natural sciences except systematic botany with thorough exhibits of each field. Library—150,000 vols. Conducts expeditionary work.

Arizona State Museum: University of Arizona, Tucson, Ariz.; open during school year.

Covers field of Southwestern archaeology and the living Indian tribes of locale.

Buffalo Museum of Science: Humboldt Park, Buffalo, N. Y.; daily 10 A. M. to 5 P. M., Saturday 9 A. M. to 5 P. M., Sunday and holidays 1:30 to 5:30 P. M.

Exhibits begin with constitution of matter and ending with civilization; Chinese pottery, Babylonian seals, Luistun bronzes, African and South Sea artifacts; collection of 200 first and rare editions of scientific monographs.

Carl Planetary and Institute of Popular Science: Pittsburgh 12, Pa.; daily 1 to 3 P. M. Fee twelve to thirty-eight cents.

Planetary sky shows changed monthly and five exhibit galleries depicting various scientific phenomena and equipment. Demonstration lectures.

California Academy of Sciences: Golden Gate Park, San Francisco 18, Calif.; every day from 10 A. M. to 5 P. M.

Habitat groups North American mammals—36; mounted birds—18 habitat

groups; African Hall of 24 habitat African groups; maintains library and reference collection numbering some four million catalogued specimens.

Chicago Academy of Sciences: Lincoln Park, Chicago 14, Ill.; daily 9 A. M. to 5 P. M., Sunday 1 to 5 P. M.

Habitat groups and systematic exhibits of plants, animals, rocks, fossils of the Chicago region and some groupings of the North American continent.

Chicago Natural History Museum (formerly Field Museum): Grant Park, Chicago 5, Ill.; daily various hours according to season. Fee 30 cents except Thurs., Sat. and Sun.

Covers anthropology, botany, geology, and zoology. Complete displays and exhibits.

Cleveland Museum of Natural History: 2717 Euclid Ave., Cleveland, Ohio; daily 10 A. M. to 4 P. M., Sundays 2:30 to 5:30 P. M.

Collection of 54,000 birds, Upper Devonian fossil fishes, natural history collections including anthropological materials, the most complete mastodon yet found. Sponsors expeditions and results published in brochures.

Colorado Museum of Natural History: City Park, Denver, Colo.; daily 9 A. M. to 4:30 P. M., Sundays Noon to 5 P. M.

Complete groupings by habitat of all phases of natural history. Extensive.

Franklin Institute for the Promotion of the Mechanic Arts: Benjamin Franklin Parkway, Philadelphia 3, Pa.; daily except Monday 1 to 6 P. M., Saturday 10 A. M. to 6 P. M. Fee thirty cents.

More than 4,000 exhibits showing the fundamentals and applications of the physical sciences; planetarium; Library—128,000 vols. and 40,000 pamphlets, including complete patent literature of United States and other nations. Public Observatory.

Hayden Planetarium of the American Museum of Natural History: 81st St. and Central Park West, New York 24, N. Y.; every day various hours. Fee children 35 cents, adults 50 cents daily and 65 cents evenings.

Planetarium Dome one of world's finest in demonstration of stellar movements and Hall of the Sun represents solar system to scale. Permanent exhibits include meteorites, replica of Aztec Calendar Stone, timepieces and astronomical instruments and a large collection of astronomical paintings.

Museum of Science and Industry: Jackson Park, Chicago 37, Ill.; every day except Christmas, daily 9:30 A. M. to 5:30 P. M., Sundays and holidays to 7 P. M.

Eight acres of exhibits dedicated to exhibits and full-sized working models of science and industry. Includes coal mine,

foundry, 3,000-foot electric railway, models of refineries, drydocks, Boulder Dam; various visitor-operated exhibits, theater shows, and static exhibits.

Natural History Museum: Balboa Park, San Diego, California; daily except Christmas, 9 A. M. to 5 P. M.

Public displays and scientific investigations of the natural history of the Southwestern United States and Lower California and Mexico. Over 400,000 specimens of birds, mammals, reptiles, shells, invertebrates and plants kept in working laboratories for use by research students.

New York Museum of Science and Industry: 30 Rockefeller Plaza, New York, N. Y.;

daily 10 A. M. to 10 P. M. Fee children 25 cents, adults 48 cents.

Displays of inventions, instruments and techniques in the field of science and industry.

Southwest Museum: Highland Park, Los Angeles 42, Calif.; every day except Monday from 1 to 5 P. M.

Exhibits and material on the archaeology and ethnology of American aborigines.

United States National Museum (Smithsonian Institute): Mall, Washington, D. C.; every day 9 A. M. to 4:30 P. M.

Contains more than 18 million specimens covering anthropology, biology, geology, engineering and industries, and history, housed in three buildings.

Historical Museums

Chicago Historical Society: Clark St. at North Ave., Chicago, Ill.; daily 9:30 A. M. to 4:30 P. M., Sundays—Spring to Fall 12:30 to 5:30 P. M., Fall to Spring 1 to 6 P. M. Fee 25 cents Sundays.

Forty chronological exhibit rooms from Spanish exploration of the North American continent to date. Lincoln Dioramas and complete Lincolniana. George Washington collection of personal items. Eight Dioramas depicting stages of Chicago development from 1795 to 1893. Library—83,000 vols. and 100,000 manuscripts.

Louisiana State Museum: Jackson Square, New Orleans 16, La.; every day except Christmas, 9 A. M. to 5 P. M.

Seven buildings housing various phases of Louisiana historical development.

Minnesota Historical Society: Cedar and Central Sts., St. Paul 1, Minnesota; weekdays 8:30 A. M. to 5 P. M., Saturdays to 12:30 P. M.

Complete representation of Minnesota's historical development, including paintings, photographs, engravings and objects of interest.

Museum of the American Indian: Broadway at 155th St., Manhattan, New York 32, N. Y.; afternoons except Sundays and holidays 2 to 5 P. M.

Collections of material cultures, handicraft and arts of western hemisphere, indigenous groups from Arctic to Tierra del Fuego including West Indies and

coastal islands. Comprehensive study collections available to accredited students.

New York Historical Society: Central Park West at 77th St., New York 22, N. Y.; daily except Monday from 1 to 5 P. M., Saturdays from 10 A. M. to 5 P. M.

Comprehensive collection early American portraits arranged chronologically, a gallery devoted to American folk arts and crafts, exhibitions on Colonial and Revolutionary New York City; special collections include 467 original water colors of American birds by Audubon and copies of John Rogers statuette groups with 35 originals. Business and professional collection comprises trade and commercial exhibits. Research library—300,000 vols. American history and large collection of maps, prints, newspapers, manuscripts relating to American history.

Rosicrucian, Egyptian, Oriental Museum: Naglee Avenue, San Jose, Calif.; daily 10 A. M. to 5 P. M., Saturdays Noon to 1 P. M., Sundays Noon to 6 P. M.

Devoted to Egyptian antiquities and relics from other ancient civilizations.

Theodore Roosevelt Museum: 28 East 20 St., New York 3, N. Y.; daily except Monday 10 A. M. to 5 P. M., Sundays and holidays 1 to 5 P. M.

Exhibitions of photographs, manuscripts, personal items, etc., housed in restored birthplace of the 26th President—cartoon collection notable.

April 14, 1775

On this day, exactly 90 years before the assassination of Abraham Lincoln, an abolition society was organized in Philadelphia. It was The Pennsylvania Society for Promoting the Abolition of Slavery, the Relief of Free Negroes Unlawfully Held in Bondage, and for Improving the Condition of the African Race. The first president of the society was Benjamin Franklin.—*F. P. A.*

Founder

Benjamin Franklin (1706–1790) was a remarkable organizer. He founded the American Philosophical Society, the University of Pennsylvania, the first circulating library and the first fire-fighting company in Philadelphia; fostered the organization for the establishment of a militia in Pennsylvania. He founded what he called the "Junta," a sort of freemason lodge.—*Ency. Brit.*

THE AMERICAN ECONOMY



ESSENTIAL FACTS

about

BUSINESS • AGRICULTURE • LABOR

SOCIAL SECURITY • TAXES

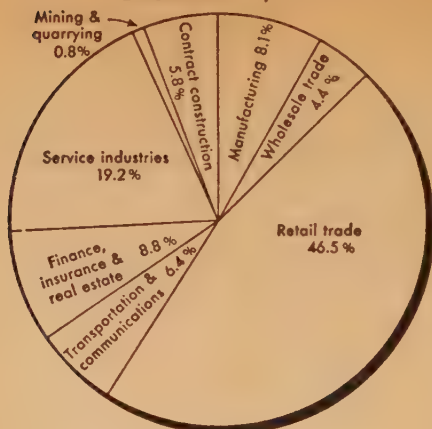
WORLD TRADE

by

THE RESEARCH INSTITUTE
OF AMERICA, Inc.

Outstanding Authority in the Analysis of Business Facts,
Economic Trends and Government Action for over
30,000 Business and Professional Firms

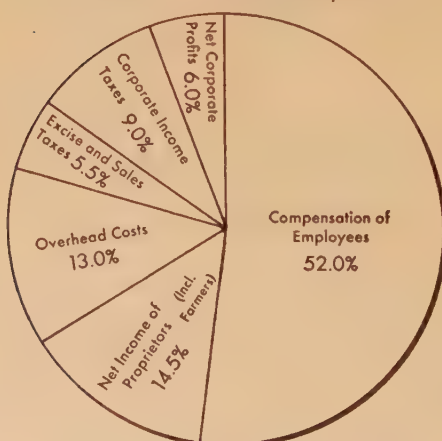
TYPES OF BUSINESSES IN OPERATION DECEMBER 31, 1945



Total businesses in operation
3,234,800

SOURCE: U.S. DEPT. OF COMMERCE

DISTRIBUTIVE SHARES OF PRIVATE PRODUCTION, 1944



TOTAL PRIVATE PRODUCTION, \$169 BILLION

Source: U. S. Dept. of Commerce

A STATISTICAL TOUR THROUGH THE AMERICAN ECONOMY

THIS PORTION of the Information Please Almanac sets its sights for a concise presentation of the essential facts of American business—and, more than that, an understandable dissection of its anatomy and how the components work together to turn out the highest standard of living in the world.

We start by seeing what makes up the American economy, what and how it produces and distributes and serves. Then we explore what it means to people in their work and daily living, what they earn and spend, owe and own.

The statistics you will encounter have been carefully selected and arranged. Where you might want information about other years or about related data you can get it from the official source given at the beginning of each table.

We have tried to make this statistical section more than a reference source for use only when you have a specific question to be answered. We think you can explore this section on your own, page by page, and get an interesting view of the American economy and how it ticks.

Summary Table of Contents

Section I	A Bird's-Eye View—Cross-Section of the American Economy, 1929-45	Section VII	What Services Contribute
" II	Down to Earth—Main Contours of American Business	" VIII	What Government Does and Costs
" III	Vital Statistics—Birth, Life, Growth and Death of Business Enterprises	" IX	How We Work
" IV	What Industry Makes	" X	What We Earn
" V	What Farmers Produce	" XI	How We Spend
" VI	What Commerce Distributes	" XII	What Living Costs Us
		" XIII	What We Own
		" XIV	What We Owe

Section I

BIRD'S-EYE VIEW—CROSS-SECTION OF THE AMERICAN ECONOMY, 1929-45

The accompanying cross-section of the American economy gives you a bird's-eye view of the economic performance of the strategic elements of the economy during the last years. It is a quick, concise summary of much of the material you will find in this section of the Information Please Almanac.

CROSS SECTION OF THE AMERICAN ECONOMY

	1929	1933	1937	1939	1940	1941	1942	1943	1944	1945
I Gross National Product (in billions of dollars except where otherwise indicated)										
Total gross national product.....	99.4	54.8	87.7	88.6	97.1	120.2	152.3	187.4	197.6	197.3
Gross national product per employed person (in thousands of dollars).....	2,128	1,446	1,927	1,965	2,090	2,449	2,923	3,576	3,816	3,820
II National income (in billions of dollars except where otherwise indicated)										
Total national income.....	83.3	42.3	71.5	70.8	77.6	96.9	122.2	149.4	160.7	161.0
Income payments to individuals.....	82.6	46.3	72.3	70.8	76.2	92.7	117.3	143.1	156.8	160.7
Disposable income.....	79.6	44.5	69.2	67.7	72.9	88.7	110.6	124.6	137.4	139.7
Salaries and wages.....	52.5	29.3	46.2	45.6	49.7	61.4	80.4	101.8	111.7	110.2
Net corporate profits.....	7.2	-0.62	3.9	4.2	5.8	8.5	8.7	9.8	9.9	9.0
Entrepreneurial income and net rents and royalties.....	17.2	8.0 ^a	14.1	13.5	14.3	18.6	23.9	27.2	28.0	29.7
Total cash farm income (incl. Gov't payments in millions of dollars).....	11,296	4,743 ²	9,217	8,684	9,108	11,748	16,020	20,016	21,036	21,485
Social security, mustering-out pay and other payments (in millions of dollars).....	1,008	1,092	1,272	1,764	1,951	1,886	2,113	2,854	4,905	7,639
Public assistance and relief (in millions of dollars).....	60	576	840	1,071	1,098	1,112	1,061	939	943	988
III Employment and Business Population (in thousands)										
Total civilian employment.....	46,700	37,900 ²	45,500	45,100	46,470	49,090	52,110	52,410	51,780	51,643 ¹
Manufacturing employment.....	10,534	6,797 ²	10,606	10,078	10,780	12,974	15,051	16,924	16,121	13,897
Agricultural employment.....	9,801	9,619 ²	9,457	9,325	9,190	8,650	8,640	8,280	8,060	8,138
Unemployment.....	2,000	12,700 ²	6,200	8,000	7,480	5,010	2,380	1,070	840	1,148 ³
Business in operation, end of year.....	3,060 ^{1,2}	2,850 ^{1,2}	3,307	3,307	3,304	3,341	3,071	2,836	2,985	3,235
IV Production										
Total industrial production (1935-9=100).....	110	58 ²	113	109	125	162	199	239	235	203
Durable goods manufactures.....	132	41 ²	122	109	139	139	279	360	353	274
Nondurable goods.....	93	70 ²	106	109	115	142	158	176	171	166
Minerals.....	107	67 ²	112	106	117	125	129	132	141	137
Steel ingot and castings production (in thousands of net tons).....	63,205	15,323 ²	56,637	52,799	66,982	82,837	86,030	88,836	89,642	79,746
Coal, bituminous (in thousands of short tons).....	534,989	309,710 ²	445,531	394,855	460,772	514,149	582,693	590,177	618,870	574,163
Crude petroleum (in millions of barrels).....	1,007	785 ²	1,279	1,265	1,353	1,402	1,387	1,506	1,678	1,711
Lumber (in millions of board feet).....	36,886	10,151 ²	25,997	24,975	31,170	36,540	36,332	34,289	32,553	27,356
Wood pulp (in thousands of short tons).....	4,863	3,760 ²	6,573	6,993	8,695	10,011	10,264	9,060	9,446	9,471
Cotton Spindle Activity, Active Spindle Hours (millions).....	99,900	70,260 ²	95,412	92,568	98,279	121,969	133,536	125,413	114,993	107,328
Electric Power (in millions of kilowatt hours).....	95,925	82,377 ²	121,836	130,336	144,985	168,170	189,181	220,970	230,736	222,486
Munitions Production ³ (1943=100) Total.....					8	16	58	100	110	87
Munitions' Inventories, Total (in millions of dollars).....			11,213	10,659	11,920	15,747	17,652	17,741	16,737	16,295
Farm Marketings, Total (1935-9=100).....	101	96 ²	101	109	112	115	128	133	140	137
Crops.....	106	94 ²	105	111	109	111	123	119	124	134
Livestock.....	97	92 ²	98	108	114	119	132	144	152	140
Freight Carloadings, Total (in thousands of cars).....	52,824	28,176 ²	37,668	33,912	36,360	42,288	42,816	42,420	44,088	41,904

V Construction

Total New Construction (in millions of dollars).....
 Private Non-Farm Residential.....
 Private Industrial.....
 Public Construction.....
 Value of Construction Contracts Awarded (1923-5=100).....

VI Distribution (in millions of dollars except where otherwise indicated)

Consumer Expenditures for Goods.....
 Consumer Expenditures for Services.....
 Sales of all Wholesalers.....
 Sales of all Retail Stores.....
 Chain Stores and Mail Order Houses.....
 Independent Stores.....
 Inventories of all Wholesalers, Dec. 31.....
 Inventories of all Retail Stores, Dec. 31.....
 Advertising Volume, Printer's Ink (1935-9=100).....
 Exports of U. S. Merchandise.....
 Lend-lease Exports.....
 Imports for Consumption.....

VII Prices

Wholesale Prices (U. S. B. L. S. 1926=100).....
 Manufactured Products.....
 Raw Materials.....
 Farm Products.....
 Construction Costs (Engineering News Record; 1913=100).....
 Retail Prices, All Commodities (1935-9=100).....
 Prices Received by Farmers (1909-14=100).....
 Cost of Living (U. S. B. L. S. 1935-9=100).....

VIII Financial (in millions of dollars except where otherwise indicated)

Bank Debts, 141 Centers.....
 Commercial, Industrial and Agricultural Loans⁶.....
 Consumer Short-Term Debt, Dec. 31.....
 Currency in Circulation, Dec. 31.....
 Federal Expenditures (Fiscal Year).....
 War Program.....
 Gross National Debt, June 30.....
 New Corporate Security Issues.....
 Stock Prices (Standard & Poor's; 1935-9=100).....

9,913	2,223	5,308	6,060	6,938	10,584	13,564	7,887	4,197	4,597
2,797	278	1,372	2,114	2,355	2,765	1,315	535	670	670
949	176	492	254	442	801	346	156	208	642
2,391	1,218	2,034	2,441	2,739	5,346	10,656	6,218	2,451	2,050
117	25	59	72	81	122	166	71	42	69
44,297	24,085	38,585	39,000	44,800	49,200	54,200	61,700	66,700	71,800
24,546	17,059	21,700	22,700	23,900	25,400	27,800	29,700	31,800	33,100
66,983	30,010	56,586	55,266	61,755	83,601	93,231	99,290	103,403	105,386
48,459	24,517	42,150	42,042	46,388	55,490	57,552	63,680	69,484	76,572
10,412	6,618	9,426	9,570	10,382	12,434	14,054	14,431	15,484	16,296
38,047	17,899	32,724	45,696	36,006	43,056	49,249	54,000	60,276	60,276
.....	.....	3,890	3,549	3,730	4,697	3,992	3,965	4,002	4,275
7,200	.....	5,033	5,117	5,435	6,728	6,429	5,965	5,869	6,100
149.1	75.9	109.9	97.2	100.1	104.5	104.5	122.7	130.7	137.3
5,157	1,576 ²	3,299	3,123	3,934	5,020	8,004	12,841	14,163	9,589
.....	.....	.....	.....	.....	741	4,926	10,340	11,298	5,542
4,339	1,325	3,010	2,276	2,541	3,222	2,769	3,390	3,879	4,075
95.3	64.8 ²	86.3	77.1	78.6	87.3	98.8	103.1	104.0	105.8
94.5	70.3 ²	87.2	80.4	81.6	89.1	98.6	100.1	100.8	101.8
97.5	55.1 ²	84.8	70.2	71.9	83.5	100.6	112.1	113.2	116.8
104.9	48.2 ²	86.4	65.3	67.7	82.4	105.9	122.6	123.3	128.2
207.0	156.6 ²	236.3	235.8	242.9	259.3	277.6	290.9	299.4	308.9
.....	.....	.....	99.0	100.6	108.3	124.9	134.0	137.6	141.3
146	65 ²	121	93	98	122	159	192	195	202
122.5	92.4	102.7	99.4	100.2	105.2	116.5	123.6	125.5	128.4
935,030	322,365 ²	433,043	389,677	408,535	491,649	574,702	715,782	807,940	884,305
.....	.....	4,601	4,668	5,319	7,145	6,313	6,421	6,415	7,249
7,637	4,082 ²	7,467	7,981	9,153	9,899	6,485	5,338	5,777	6,734
4,578	5,388 ²	6,550	7,598	8,732	11,160	15,410	20,449	25,307	28,515
2,958	4,611	7,754	8,361	8,824	13,862	33,980	79,604	95,129	98,360
694	.....	1,206	1,657	1,601	26,011	36,961	72,109	87,039	1,90,029
16,931	22,539	36,425	40,440	42,968	48,961	72,422	136,696	201,003	258,682
.....	.....	2,304	2,127	2,724	2,480	988	1,088	2,957	5,690
200.9	51.2 ²	117.5	94.2	88.1	80.0	69.4	91.9	99.8	121.5

¹As of September 30.

²Indicates 1932.

³Data beginning July, new series.

⁴1940 data includes July-December; 1945 data January-September.

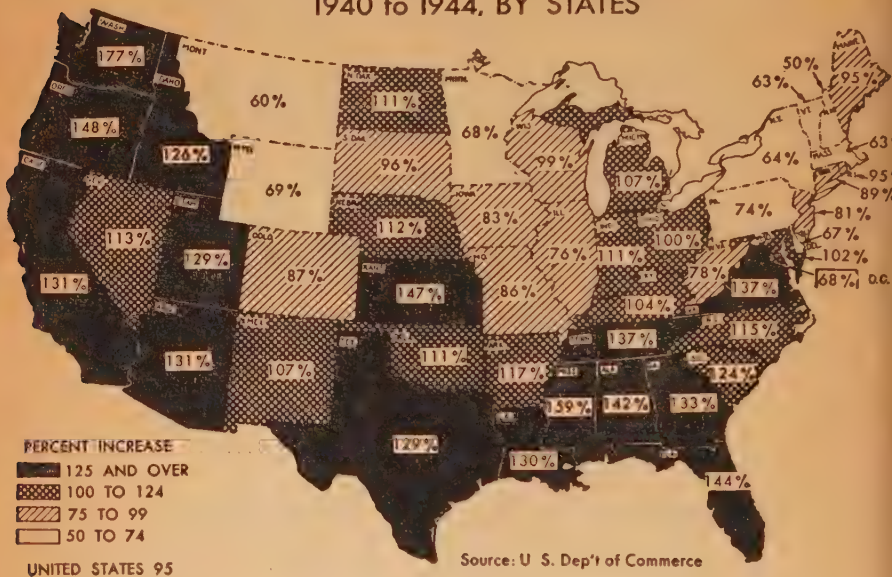
⁵Wednesday nearest end of year.

Section II

DOWN TO EARTH—MAIN CONTOURS OF AMERICAN BUSINESS

In this section we begin to come down to earth after the over-all look we obtained in the opening section. We now get closer to the main contours of the magnificent, complicated structure known as "American Business." We see its comparative anatomy, its make-up by function, by contribution to the national income, by size, and by geographical distribution.

PERCENTAGE INCREASE IN TOTAL INCOME PAYMENTS, 1940 to 1944, BY STATES



Gross National Product or Expenditure

(in billions of dollars)

Source: U. S. Department of Commerce.

Item	1929	1932	1937	1939	1940	1941	1943	1944	1945	1946
Government expenditures for goods and services.....	11.0	10.2	13.6	16.0	16.7	26.5	93.5	97.1	83.0	39.6
Federal Government.....	2.7	2.4	6.1	7.9	8.8	18.6	86.2	89.5	75.1	31.2
War.....				1.4	2.8	13.3	81.3	83.7	69.0	23.9
Nonwar.....				6.5	6.1	5.3	4.9	5.7	6.1	7.3
State and local government.....	8.3	7.8	7.5	8.1	7.9	7.9	7.4	7.7	7.9	8.4
Private gross capital formation.....	17.6	2.2	11.6	10.9	14.8	19.1	2.5	2.0	9.4	22.1
Construction.....	8.3	1.8	3.7	3.6	4.3	5.3	1.6	1.6	2.7	6.4
Residential.....				2.0	2.4	2.8	0.6	0.5	0.8	2.1
Other.....				1.6	2.0	2.5	1.0	1.1	1.9	4.0
Producers' durable equipment.....	7.3	2.4	6.3	5.5	6.9	8.9	3.1	4.0	6.4	8.3
All other*.....	2.0	-2.0	1.6	1.9	3.6	4.9	-2.1	-3.6	0.3	6.4
Consumers' goods and services.....	70.8	43.0	62.5	61.7	65.7	74.6	91.3	98.5	104.9	121.1
Durable goods.....	9.9	4.2	7.6	6.4	7.4	9.1	6.6	6.7	7.4	11.4
Nondurable goods.....	60.9			32.6	34.4	40.1	55.1	60.0	64.4	75.5
Services.....		38.8	54.9	22.7	23.9	25.4	29.7	31.8	33.1	34.2
Total, gross national product or expenditure.....	99.4	55.4	87.7	88.6	97.1	120.2	187.4	197.6	197.3	182.4

*Includes net change in business inventories, net exports of goods and services, and net exports and monetary use of gold and silver.

†First 6 months seasonally adjusted annual rate.

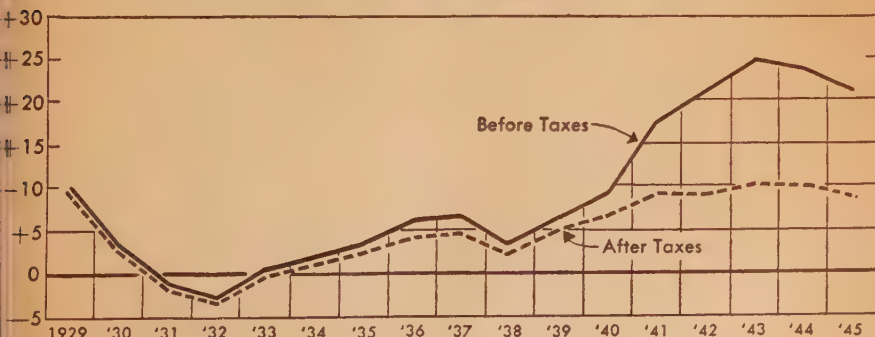
NATIONAL INCOME BY INDUSTRIAL DIVISIONS

(in millions of dollars)

Source: U. S. Department of Commerce.

Industrial Division	1929	1932	1937	1938	1939	1940	1941	1942	1943
Agriculture	6,772	2,354	6,106	4,973	5,230	5,313	7,377	11,079	13,518
Minining, total	1,919	539	1,729	1,218	1,348	1,580	1,946	2,244	2,485
Anthracite coal	273	141	128	104	117	127	152	176	200
Bituminous coal	656	247	566	467	503	615	786	962	1,071
Other	990	151	1,035	647	728	838	1,008	1,106	1,214
Manufacturing, total	20,897	6,217	18,016	13,570	16,965	20,215	28,497	37,507	48,591
Food, beverages, and tobacco	2,478	1,419	2,284	2,192	2,379	2,486	2,910	3,345	3,829
Paper, printing, and publishing	2,191	1,110	1,876	1,619	1,729	1,889	2,192	2,222	2,494
Textiles and leather	3,187	1,204	2,610	2,175	2,711	2,846	3,980	4,559	5,048
Construction materials and furniture	2,169	346	1,590	1,244	1,531	1,800	2,410	2,671	2,886
Chemicals and petroleum refining	1,833	621	1,474	1,145	1,482	1,801	2,400	2,997	3,580
Metals, machinery, and transportation equipment	8,169	1,290	7,403	4,573	6,292	8,441	13,236	19,980	28,487
Rubber and miscellaneous	870	227	779	622	841	952	1,369	1,733	2,267
Contract construction	3,547	854	1,793	1,771	1,942	2,153	3,565	5,681	4,332
Transportation, total	6,982	3,634	5,080	4,323	4,950	5,381	6,414	8,144	9,685
Steam railroads, Pullman, and express	4,652	2,086	2,986	2,458	2,830	3,096	3,839	5,086	5,773
Water transportation	470	254	492	396	479	540	597	632	919
Street railways	661	428	382	331	348	348	349	437	526
Motor transportation, public warehouses, and other transportation	1,199	866	1,220	1,138	1,293	1,397	1,629	1,989	2,467
Power and gas	1,427	1,097	1,405	1,370	1,459	1,587	1,652	1,591	1,667
Communication	1,046	726	862	865	925	937	1,007	1,056	1,176
Trade, total	11,878	5,552	10,439	9,823	10,956	12,096	14,840	15,926	17,551
Retail	7,731	3,812	6,932	6,484	7,135	7,904	9,626	10,255	11,456
Wholesale	4,147	1,740	3,507	3,339	3,821	4,192	5,214	5,671	6,095
Finance, total	10,136	5,300	6,897	6,691	6,796	6,983	7,687	8,463	9,165
Banking	1,454	624	967	927	978	1,094	1,243	1,382	1,532
Insurance	1,267	955	1,224	1,216	1,193	1,152	1,179	1,272	1,291
Security brokerage and real estate	7,415	3,721	4,706	4,548	4,625	4,737	5,265	5,809	6,342
Government, total	6,407	6,557	9,114	9,869	9,987	10,303	11,469	16,732	26,268
Federal	2,158	2,228	4,623	5,143	5,169	5,367	6,433	11,580	20,988
State, county, local and public									
Education	4,249	4,329	4,491	4,726	4,818	4,936	5,036	5,152	5,280
Health	8,315	4,730	6,904	6,657	7,027	7,545	8,396	9,518	10,362
Miscellaneous	4,000	2,403	3,168	3,070	3,244	3,481	4,007	4,291	4,592
National income	83,326	39,963	71,513	64,200	70,829	77,574	96,857	122,232	149,392

CORPORATE PROFITS BEFORE AND AFTER FEDERAL AND STATE INCOME AND EXCESS PROFITS TAXES



Source: U. S. Dep't of Commerce

MAKE-UP OF AMERICAN ECONOMY, 1939

Source: U. S. Bureau of the Census,
Bureau of Labor Statistics, and Bureau of
Agricultural Economics.

Type	Thou- sands of units	Value of output in millions of dollars	Thou- sands of employees	Payrolls in mil- lions of dollars
Manufacturing...	184	56,843	8,936 ¹	11,630 ¹
Construction...	215	4,520	1,074 ¹	1,404 ¹
Transportation and public utilities...	208 ²	n.a.	2,912 ²	.....
Agriculture.....	6,097 ³	9,440 ⁴	10,740 ³	782 ⁴
Trade.....	1,971	97,308	6,162 ¹	7,153 ¹
Retail.....	1,771	42,043	4,600	4,529
Wholesale.....	201	55,265	1,562	2,624
Services.....	646	3,420	1,102	1,070

¹Includes paid executives of corporations but not proprietors of unincorporated businesses. Number of proprietors, where obtainable, follows in thousands: Service industries—652; retail trade—1,614; whole sale trade—134.

²Total employees.

³Includes 8,145,000 farm operators and family workers not all receiving wages and 2,595,000 hired workers.

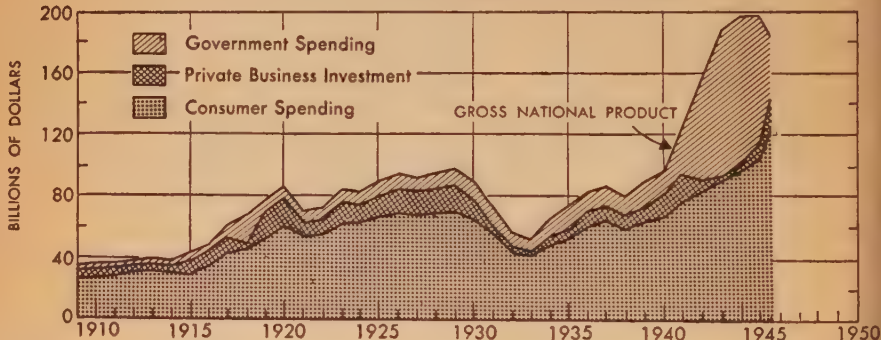
⁴Only 2,260,237 farms reporting cash wages in 1939.

⁵Operating businesses as of September 30.

⁶Gross income exclusive of government payments.

⁷Number of farms April 1, 1940.

NATIONAL PRODUCT 1909-1946



Source: U. S. Dep't of Agriculture

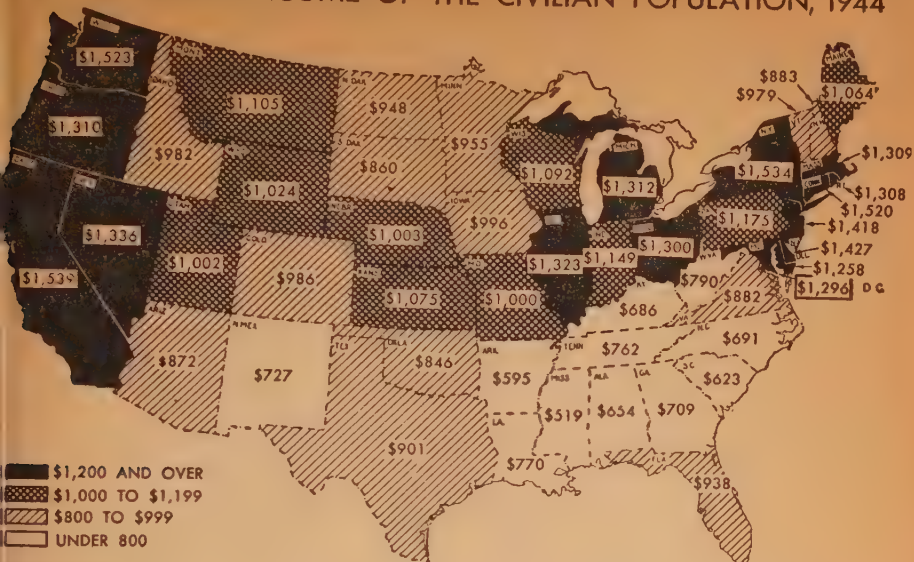
Billion Dollar Companies, as of December, 1945 (in millions of dollars)

Source: Moody's Manual of Industrials and Moody's Manual of Banks.

		Assets			Assets
Industrials			Commercial Banks—Continued		
Standard Oil Co. (N. J.).....	2,532		National City (N. Y.).....	5,434	
U. S. Steel Corp.....	1,891		Guaranty Trust (N. Y.).....	3,814	
General Motors Corp.....	1,814		Continental Illinois (Chicago).....	2,827	
E. I. Du Pont de Nemours & Co.....	1,205		Manufacturers Trust (N. Y.).....	2,695	
Socony-Vacuum Oil Co.....	1,076		First National (Chicago).....	2,475	
Ford Motor Co*.....	1,021		Central Hanover (N. Y.).....	1,975	
Railroads and Public Utilities			Bankers Trust (N. Y.).....	1,925	
American Telephone & Telegraph System.....	6,766		Security First (Los Angeles).....	1,730	
Pennsylvania Railroad Co.....	2,224		Life Insurance Companies		
New York Central Railroad Co.....	1,735		Metropolitan Life Insurance Co. (N. Y.).....	7,565	
Southern Pacific Company.....	1,686		Prudential Insurance Co. of America (N. J.).....	6,350	
Consolidated Edison Co. of N. Y.....	1,324		Equitable Life Assurance Society of the U. S. (N. Y.).....	3,845	
Union Pacific Railroad Co.....	1,287		New York Life Insurance Co. (N. Y.).....	3,814	
Atchison, Topeka & Santa Fe Ry. Co.....	1,247		Northwestern Mutual Life Insurance Co. (Wisc.).....	1,875	
Baltimore & Ohio Railroad Co.....	1,167		John Hancock Mutual Life Insurance Co. (Mass.).....	1,835	
Commercial Banks			Mutual Life Insurance Co. (N. Y.).....	1,795	
Chase National (N. Y.).....	6,093		Travelers Insurance Co. (Conn.).....	1,515	
Bank of America (San Francisco).....	5,626		Aetna Life Insurance Co. (Conn.).....	1,155	
			Penn Mutual Life Insurance Co. (Pa.).....	1,015	

*Dec. 31, 1944—From report to the Massachusetts Commissioner of Corporations.

PER CAPITA INCOME OF THE CIVILIAN POPULATION, 1944



UNITED STATES \$1,131

Source: U. S. Dept. of Commerce

Large vs. Small Business in Manufacturing, 1939 and 1944

Source: Smaller War Plants Corporation.

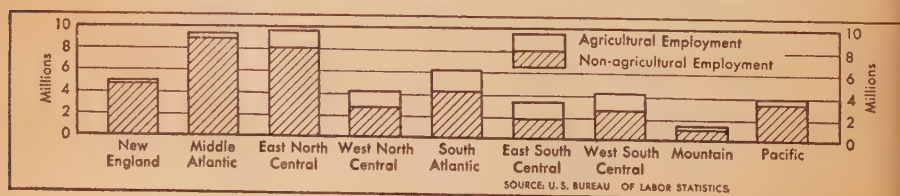
Item	Firms with less than 500 employees			
	Percent of employment		Percent of firms	
	1939	1944	1939	1944
War industries:				
Iron and steel and their products.....	43.2	35.6	97.6	94.6
Nonferrous metals and their products.....	41.2	35.7	98.7	97.8
Ordnance.....		9.5	...	74.1
Machinery (except electrical).....	59.9	41.8	98.4	97.1
Electrical machinery.....	27.4	15.2	95.3	90.8
Transportation equipment.....	15.9	7.3	95.3	87.8
Chemicals and allied products.....	51.0	36.0	98.4	97.7
Petroleum and coal products.....	31.8	23.1	95.2	90.7
Rubber products.....	30.5	15.4	96.8	89.0
Nonwar industries:				
Tobacco manufactures.....	21.7	36.6	95.4	97.6
Printing and publishing.....	71.3	73.9	99.6	99.5
Leather and leather products.....	56.5	61.5	96.8	97.7
Textile mill products.....	33.8	40.9	91.7	92.5
Food and kindred products (and beverages).....	48.5	52.2	99.3	98.7
Stone, clay, and glass products.....	62.7	50.2	98.4	98.0
Furniture and finished lumber products.....	75.6	69.3	99.2	98.8
Apparel and products from fabrics.....	78.7	83.7	99.6	99.3
Lumber and timber basic products.....	81.6	78.2	99.7	99.5
Paper and allied products.....	54.6	53.9	97.9	95.2
Miscellaneous.....	83.8	58.8	99.7	98.7
Total manufacturing.....	51.7	38.1	98.9	97.8

REGIONAL ECONOMIC DIFFERENCES

Sources: Dept. of Commerce and Natl. Ind. Conf. Bd., Broadcast Measurement Bureau.

States	Value of mfrs., in millions of dollars, 1939	Retail sales, in millions of dollars, 1939	Income received per capita, 1945	National wealth per capita, 1937	Non-agricultural employment (in thousands), 1945	Percent of homes with telephones, 1946	Percent of homes with radios, 1946
Alabama.....	575	436	\$ 700	\$1,056	513	20	72
Arizona.....	98	162	918	2,200	106	27	82
Arkansas.....	160	298	654	803	261	17	73
California.....	2,798	3,188	1,480	2,516	2,378	53	96
Colorado.....	222	409	1,100	2,084	261	52	91
Connecticut.....	1,230	717	1,449	3,127	649	67	98
Delaware.....	115	110	1,381	3,011	90	53	93
D. C.....	80	403	1,361	4,732	456	67	96
Florida.....	242	614	996	1,347	452	28	80
Georgia.....	677	625	745	1,079	628	26	73
Idaho.....	90	176	1,054	2,706	94	40	92
Illinois.....	4,795	2,858	1,360	2,668	2,651	62	96
Indiana.....	2,228	1,066	1,152	2,536	971	57	93
Iowa.....	719	823	1,109	2,613	433	68	95
Kansas.....	464	474	1,113	2,380	371	60	91
Kentucky.....	481	520	735	1,404	415	29	81
Louisiana.....	565	486	785	1,219	462	28	73
Maine.....	345	281	1,051	2,404	235	53	92
Maryland.....	1,027	619	1,212	2,505	642	50	93
Massachusetts.....	2,460	1,738	1,321	2,719	1,503	63	98
Michigan.....	4,348	1,821	1,212	2,676	1,548	59	96
Minnesota.....	846	1,017	1,061	1,900	615	65	95
Mississippi.....	175	282	556	728	238	13	66
Missouri.....	1,388	1,103	1,063	2,004	915	51	89
Montana.....	152	222	1,172	3,757	107	39	92
Nebraska.....	274	397	1,117	2,344	254	60	92
Nevada.....	21	62	1,243	6,173	41	41	89
New Hampshire.....	237	183	971	2,519	131	56	94
New Jersey.....	3,429	1,580	1,373	2,413	1,396	51	98
New Mexico.....	25	126	812	1,484	81	22	74
New York.....	7,134	5,578	1,595	3,893	4,360	48	98
North Carolina.....	1,421	633	732	1,343	685	21	78
North Dakota.....	44	156	1,123	2,362	72	42	94
Ohio.....	4,585	2,441	1,289	2,486	2,215	61	95
Oklahoma.....	312	513	889	1,521	360	39	83
Oregon.....	365	442	1,266	2,606	331	43	94
Pennsylvania.....	5,476	3,133	1,199	2,564	3,015	50	96
Rhode Island.....	516	275	1,268	3,011	258	51	98
South Carolina.....	398	332	663	1,207	367	16	71
South Dakota.....	81	169	1,083	2,362	80	51	91
Tennessee.....	728	606	813	1,312	521	33	79
Texas.....	1,530	1,804	917	1,662	1,372	34	81
Utah.....	167	171	1,023	2,289	139	49	96
Vermont.....	103	123	1,023	2,509	81	56	94
Virginia.....	989	628	903	2,144	659	36	81
Washington.....	637	669	1,407	2,577	590	51	95
West Virginia.....	442	404	839	1,585	408	34	86
Wisconsin.....	1,605	1,065	1,161	2,634	750	57	96
Wyoming.....	45	100	1,096	3,623	65	39	91
Total.....	56,843	42,042	1,150	2,335	36,980*	48	90

*Total employment differs from the sum of individual states due to different technical procedure.



Section III

VITAL STATISTICS—BIRTH, LIFE, GROWTH AND DEATH OF
BUSINESS ENTERPRISES

Births, turnover and deaths in American business life are numerous and rapid. There are more than 3,000,000 business enterprises functioning in the U. S. today. Wartime pressures that forced more than half a million small businesses to shut their doors have already been reversed, and the number of American business units is pushing toward an all-time high.

There are some interesting uniformities in the growth, decline and fall of business enterprises. Each year from 400,000 to 500,000 new firms are hopefully launched. But misfortune and turnover are so great among existing concerns that the number of firms going out of business in any year is usually just about the same as the number of new firms beginning operations.

In an average year one out of every six or seven of all existing business enterprises gives up the ghost completely, sells out to new owners, or reorganizes for another try. More than 90 percent of these business deaths involve firms with three or less on the payroll and more than half of those who shut their doors have no employees other than the boss himself.

Statistics like these enable us to figure accurately the average probability of a new firm's remaining alive. Here are the approximate odds. As in most things, the first year is the hardest. Out of every hundred new businesses, about thirty give up the attempt within a year. Another twenty will have called it quits by the third year. Before the decade is out, eighty out of every hundred originals will have surrendered.

This section amplifies these vital statistics in greater detail.

Current Assets and Liabilities of All
U. S. Corporations
(in billions of dollars)

Source: U. S. Securities and Exchange
Commission.

	December 31					
	1939	1941	1942	1943	1944	1945
Current assets:						
Cash on hand and in banks.....	10.9	13.9	17.5	22.2	22.6	22.5
U. S. Gov't securities.....	2.2	3.9	10.0	15.9	20.9	21.1
Inventories.....	18.0	25.6	27.3	27.3	26.3	26.4
Other.....	23.5	29.4	28.6	28.5	28.7	27.7
Total.....	54.6	72.8	83.4	93.9	98.5	97.7
Current liabilities:						
Federal income tax..	1.2	7.1	12.6	16.5	16.5	11.1
Other.....	28.8	33.6	34.7	35.8	36.2	34.5
Total.....	30.0	40.7	47.3	52.3	52.7	45.6
Net working capital...	24.6	32.1	36.1	41.6	45.8	52.1

Business Vital Statistics
(thousands of concerns)

Source: U. S. Department of Commerce and
Dun & Bradstreet.

Year	Total operating businesses*	New entrants	Discontinued businesses	Failures
1929...	3,060†	†	†	23
1933...	2,850†	†	†	20
1939...	3,307	†	†	15
1940...	3,304	431	434	14
1941...	3,341	517	480	12
1942...	3,071	408	678	9
1943...	2,836	163	395	3
1944...	2,965	340	172	1
1945...	3,235	422	152	1

*As of end of year.

†As of September 30.

‡Not available.

Number of Businesses
(in thousands)

Source: U. S. Bureau of Foreign and Domestic Commerce.

	September 30			December 31				
	1929	1933	1935	1941	1942	1943	1944	1945
Manufacturing	251.3	169.0	199.3	225.4	225.2	227.6	239.4	262.5
Wholesale Trade	120.4	116.5	127.8	143.8	129.4	114.0	125.3	141.8
Retail Trade	1,361.1	1,340.0	1,425.1	1,590.8	1,433.7	1,318.0	1,375.0	1,504.2
Transportation, communication, public utilities	166.6	151.6	177.6	204.7	194.5	187.9	195.2	205.5
Finance, insurance, and real estate	306.2	276.2	273.5	279.8	269.6	267.5	276.5	285.6
Service industries	596.0	584.7	618.9	631.2	589.9	547.5	572.6	619.8
Mining and quarrying	22.8	21.4	22.3	24.1	26.0	26.0	25.7	26.3
Contract construction	235.6	191.0	180.9	241.2	203.0	147.1	155.0	189.1
Total	3,060.0	2,850.4	3,025.4	3,341.0	3,071.3	2,835.6	2,964.8	3,234.

Section IV

WHAT INDUSTRY MAKES

American industry is the most productive in the world. Because of its unsurpassed stock of modern plants, machinery and other productive equipment, the training and efficiency of its more than twenty million workers, and the skillful productive techniques instituted and supervised by intelligent management, industrial output per man-hour in the United States is reliably estimated at approximately twice the British level, three to four times the prewar French and German achievements, and many more times those of other European countries.

Manufacturing is the pivotal industrial occupation, for its periodic expansions and contractions largely determine the level of activity achieved in every other sector of the economy. Depression in manufacturing means unemployment not only for workers in the manufacturing industries, but also for the rest of the working population.

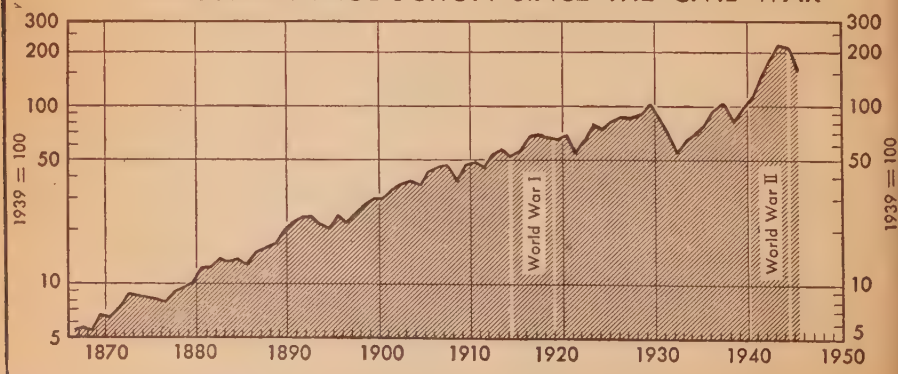
One key statistic highlights the preponderance of manufacturing in the American economy. In the thirty-five year period from 1909 through 1944, the physical volume of manufacturing output increased 496 percent. In the same period, output in minerals rose 254 percent, and in agriculture 167 percent.

Manufactures by Industry Group—1939

Source: U. S. Department of Commerce and U. S. Treasury Department.

Group	Number of estab- lishments	Wage earners (average for the year)	Wages in thousands of dollars	Value of products in thousands of dollars	Net capital per wage earner in dollars
All industries.....	184,230	7,886,567	9,089,941	56,843,025	6,135
Food and kindred products.....	52,213	911,218	982,485	11,940,215	7,661
Textile-mill products and other fiber manufactures.....	6,444	1,082,602	908,379	3,930,678	2,777
Apparel and other finished products.....	20,206	751,377	654,402	3,325,015	1,096
Lumber and timber basic products.....	11,520	360,613	310,381	1,122,058	3,313
Furniture and finished lumber products.....	8,457	293,570	274,738	1,267,724	3,061
Paper and allied products.....	3,279	264,716	309,857	2,019,568	6,706
Printing, publishing, and allied industries.....	24,878	324,535	493,616	2,578,464	5,951
Chemicals and allied products.....	9,203	287,136	356,176	1,854,658	13,983
Products of petroleum and coal.....	989	105,428	173,702	2,953,973	59,486
Rubber products.....	595	120,740	161,410	902,329	7,000
Leather and leather products.....	3,508	327,663	294,290	1,389,514	2,046
Stone clay, and glass products.....	7,024	287,524	329,524	1,440,151	6,038
Iron and steel and their products, except machinery.....	8,994	966,367	1,313,633	6,591,530	6,689
Nonferrous metals and their products.....	5,600	228,753	299,220	2,572,854	5,646
Electrical machinery.....	2,014	256,467	335,820	1,727,390	5,527
Machinery (except electrical).....	9,506	522,980	748,288	3,254,174	7,187
Automobiles and automobile equipment.....	1,133	398,963	646,406	4,047,873	6,968
Transportation equipment except automobiles.....	968	157,097	239,254	882,897	7,879
Miscellaneous industries.....	7,699	238,827	258,325	1,162,958	4,418

U.S. INDUSTRIAL PRODUCTION SINCE THE CIVIL WAR



Industrial Production Indexes, by Groups (1935-39 average = 100)

Source: Board of Governors of the Federal Reserve System.

Item	1919	1926	1929	1932	1937	1939	1940	1941	1943	1944	1945	1946*
Durable Manufactures												
Iron and steel.....	84	115	133	32	123	114	147	186	208	206	183	123
Machinery.....	—	102	130	43	126	104	136	221	443	439	343	218
Transportation equipment.....	—	109	134	38	123	103	145	245	735	719	487	226
Nonferrous metal and products.....	—	113	136	52	122	113	139	191	267	259	204	138
Lumber and products.....	—	148	146	51	113	106	116	134	129	125	109	124
Stone, clay and glass products.....	50	105	110	51	114	114	124	162	173	164	163	184
Total.....	84	114	132	41	122	109	139	201	360	353	274	175
Nondurable Manufactures												
Textiles and products.....	73	84	94	71	106	112	114	152	153	148	146	160
Leather and products.....	94	90	95	76	102	105	98	123	114	113	117	128
Manufactured food products.....	77	87	101	79	103	108	113	127	145	152	150	150
Alcoholic beverages.....	—	—	—	—	108	98	101	117	117	144	178	188
Paper and products.....	—	72	85	65	107	114	123	150	139	139	139	143
Tobacco products.....	72	88	96	79	103	106	109	120	133	125	136	155
Printing and publishing.....	—	92	104	74	109	106	112	127	111	101	108	125
Petroleum and coal products.....	—	76	96	69	108	110	120	135	185	247	235	166†
Chemical products.....	—	70	89	68	112	112	130	176	384	324	284	233
Rubber products.....	—	80	100	64	104	113	123	163	228	234	215	217
Total.....	62	79	93	70	106	109	115	142	176	171	166	163
Total, durable and nondurable manufactures.....	72	95	110	57	113	109	126	168	258	252	214	168
Minerals												
Fuels.....	—	95	103	72	109	105	114	122	132	145	143	137
Metals.....	—	126	134	36	127	113	134	149	126	113	101	88
Total.....	71	100	107	67	112	106	117	125	132	140	137	130
Total, Manufactures and Minerals.....	72	96	110	58	113	109	125	162	239	235	203	163

*First 6 months seasonally adjusted average.

†First 4 months seasonally adjusted average.

Production of Selected Munitions Items

July 1, 1940—July 31, 1945

Source: War Production Board.

	Number		Number
Military and Special Purpose Airplanes		Rifles (excluding carbines).....	6,549,486
Combat.....	199,223	Carbines.....	6,049,826
Bomber.....	96,847	Pistols and revolvers.....	2,742,681
Fighter.....	98,703	Gas masks.....	25,243,274
Transport.....	23,664	Ground helmets.....	22,618,000
Naval Ships.....	71,060	Naval guns.....	165,525
Time commission ships.....	5,425	Army bombs	
Emergency cargo.....	3,037	Grenades (in thousands).....	110,047
Guns and Equipment		Land mines (in thousands).....	24,254
Heavy field artillery (complete equipment).....	9,850	Bazooka rockets.....	15,220
Howitzer cannon for heavy field artillery.....	8,006	Aircraft bombs.....	5,900,000
Howitzer recoil mechanisms for heavy field artillery.....		Naval ammunition.....	
Light field and antitank guns.....	4,031	Torpedoes.....	53,280
Howitzer guns and howitzers.....	51,420	Depth charges.....	537,604
Howitzer guns and howitzers.....	116,946	Marine mines.....	92,135
Howitzer self-propelled carriages.....	26,749	Combat and Motor Vehicles	
Bazooka rocket launchers.....	476,628	Tanks.....	86,388
Howitzer mortars.....	37,438	Armored cars.....	16,438
Light mortars.....	72,910	Scout cars and carriers.....	88,077
Howitzer machine guns.....	1,959,708	Tank chassis for self-propelled guns.....	16,018
Light machine guns.....	765,189	Trucks.....	2,434,553
Howitzer machine guns.....	2,083,506	Tractors.....	123,707

Electric Energy Production by Class of Ownership and Source of Energy

(in millions of kilowatt-hours)

Source: U. S. Dept. of Commerce.

Year	Total all classes of ownership	Ownership				Energy source		
		Privately owned*	Municipal electric utilities	Federal	Cooperatives, power districts, state projects	Non-central stations	Hydro-electric	Steam and internal combustion
1920.....	43,334	41,646	1,373	58	94	163	15,949	27,385
1929.....	95,925	91,259	3,497	300	451	418	33,191	62,734
1932.....	82,377	77,472	3,517	445	572	371	33,322	49,055
1939.....	130,336	117,772	5,688	5,476	944	456	44,022	86,314
1940.....	144,985	127,642	6,188	8,584	1,176	1,395	47,753	97,232
1941.....	168,170	145,957	7,023	10,793	2,192	2,205	51,262	116,909
1942.....	189,181	159,549	7,610	16,893	2,848	2,281	64,179	125,002
1943.....	220,970	181,825	9,223	24,485	3,156	2,281	73,943	147,027
1944.....	230,736	186,820	9,637	28,866	3,065	2,348	74,033	154,783†
1945.....	222,486	180,926	9,624	28,001	3,146	790	79,917	142,517†

*Includes electric utilities, mining, manufacturing, railways and railroads.

†Excludes small amount included in total.

Fuel Production

Source: U. S. Dept. of Interior, U. S. Dept. of Commerce, and American Gas Association.

Year	Coke, in thousands of short tons*	Anthracite coal, in thousands of short tons	Bituminous coal, in thousands of short tons	Natural gas, in millions of cubic feet (produced and marketed)	Manufactured gas, in millions of cubic feet	Crude petroleum, in thousands of 42-gal. barrels
1929.....	59,884	73,828	534,989	1,917,693	382,069	1,007,323
1933.....	27,589	49,541	333,631	1,555,474	331,129	905,656
1937.....	52,375	51,856	445,531	2,407,620	361,669	1,279,160
1938.....	32,496	46,099	348,545	2,295,562	361,073	1,214,355
1939.....	44,327	51,487	394,855	2,476,756	374,866	1,264,962
1940.....	57,072	51,485	460,772	2,660,222	403,628	1,353,214
1941.....	65,187	56,368	514,149	2,812,658	418,183	1,402,228
1942.....	70,569	60,328	582,693	3,053,475	454,326	1,386,645
1943.....	71,676	60,644	590,177	3,414,689	490,642	1,506,000
1944.....	73,703	64,445	618,870	3,780,232	509,020	1,677,753
1945.....	66,795	54,830	574,163	3,845,000	.....	1,711,103
1946†.....	23,876	29,461	235,066	.....	.....	847,752

*Beehive and by-product ovens. †First 6 months.

Gold and Silver Production in Continental United States, Alaska, Puerto Rico, and Philippine Islands

(in thousands of fine ounces)

Source: U. S. Treasury Department.

Period	Gold	Silver	Period	Gold	Silver
1792-1847.....	1,187	310	1916-1920.....	17,246	326,009
1848-1850.....	4,838	116	1921-1925.....	12,229	314,190
1851-1855.....	14,271	194	1926-1930.....	11,259	293,692
1856-1860.....	12,384	309	1931-1935.....	14,102	156,565
1861-1865.....	10,716	28,811	1936.....	4,357	63,812
1866-1870.....	12,226	49,113	1937.....	4,805	71,942
1871-1875.....	8,826	121,083	1938.....	5,090	62,665
1876-1880.....	10,301	157,681	1939.....	5,611*	65,120
1881-1885.....	7,730	182,841	1940.....	6,003	69,586
1886-1890.....	8,078	231,819	1941.....	5,976	72,336
1891-1895.....	9,107	287,057	1942.....	3,742	56,091
1896-1900.....	15,729	279,544	1943.....	1,395	40,900
1901-1905.....	19,394	278,798	1944.....	1,022	35,651
1906-1910.....	22,993	277,333	1945.....	997	28,648
1911-1915.....	22,968	338,384			

Iron and Steel Production

(in thousands of long tons)

Source: American Iron and Steel Institute and Iron Age.

Year	Pig iron and ferro-alloys	Steel ingots and castings	Total production, finished rolled products	Plates and sheets	Merchant bars	Wire rods	Structural shapes	Rails
1924.....	31,406	37,932	28,086	8,088	4,937	2,523	3,284	2,433
1929.....	42,614	56,433	41,069	12,436	7,423	3,132	4,778	2,722
1932.....	8,781	13,681	10,451	3,443	1,700	1,186	2,063	403
1937.....	37,127	50,569	36,766	14,037	6,031	3,009	3,277	1,446
1938.....	19,161	28,350	21,044	7,595	3,112	2,109	1,860	623
1939.....	31,855	47,142	34,882	12,439	5,481	3,286	2,999	1,172
1940.....	42,320	59,806	43,447	14,778	7,040	3,886	3,779	1,499
1941.....	50,613	73,964	55,647	18,119	9,802	4,704	5,111	1,721
1942.....	54,378	76,814	55,755	18,962	10,661	4,136	5,193	1,872
1943.....	56,045	79,318	56,511	20,128	10,588	4,191	4,086	1,899
1944.....	56,130	80,037	58,753	20,949	9,966	4,148	4,175	2,224
1945.....	49,035	71,162	53,404	17,244	9,361	4,046	3,988	2,158

*Beginning in 1937, data includes concrete reinforcement bars.

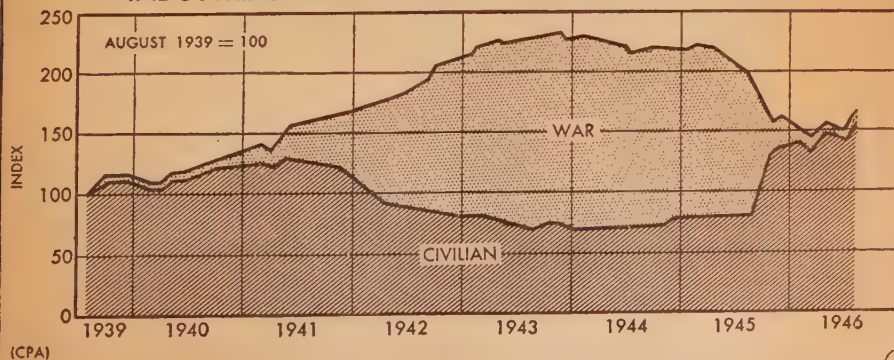
Production of Chemicals

Source: U. S. Department of Commerce, U. S. Tariff Commission, U. S. Treasury Department, National Fertilizer Association, U. S. Bureau of Mines; W. P. B.

	Methanol (in thousands of proof gals.)	Sulphuric acid (in short tons)	Ethyl alcohol (in thousands of proof gals.)	Sulphur (in long tons)	Explosives (in thousands of pounds)	Fertilizers (in thousands of short tons)	Paint, varnish, lacquer and fill- ers (in thousands of dollars)	Plastic materials	
								Cellulose derivatives (in thousands of pounds)	Synthetic resins (in thousands of pounds)
1929	12,408 ⁶	2,262,780	206,664	2,357,640	484,596	5,448	434,820	21,847	33,036 ⁴
1932	10,116	952,584	128,820	929,556	227,508	2,616	202,920	.....	.....
1937 ⁵	37,560	2,212,212	215,436	2,677,176	387,804	5,304	402,132	26,695	95,116
1939	38,916	2,051,532	221,628	2,088,384	372,468	4,932	379,272	.....	.....
1940	50,268	2,435,724	263,184	2,725,764	406,668	4,920	396,624	46,350	276,814
1941	61,872	6,820,080	367,680	3,131,328	460,080	5,280	554,196	.....	452,171
1942	68,196	7,753,980	3,576	3,455,676	472,740	5,436	529,752	.....	439,999
1943	69,804	8,604,576	5,388	2,538,792	451,776	6,768	568,620	.....	653,938
1944	75,468	9,261,972	7,176	3,218,160	444,216	6,480	618,324	116,977	782,000
1945	77,532	9,552,771	.....	3,753,188	440,148	6,943	643,424	.....	808,234

¹Crude and synthetic. ²Shipments. ³Consumption, Southern States. ⁴Coal tar resins only. ⁵Data for plastic materials is for 1935. ⁶1930.

INDUSTRIAL PRODUCTION—WAR AND CIVILIAN

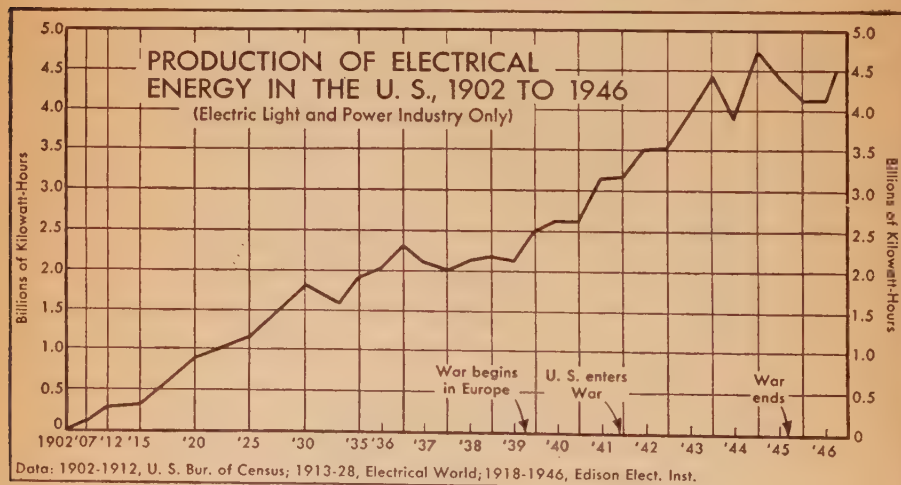


Consumer Durable Goods Output

Source: Electrical Merchandising, Radio and Television Retailing, and Automobile Manufacturers Association. Civilian Production Administration.

Year	Electric clothes washers		Electric irons		Electric ranges		Electric vacuum cleaners		Electric refrigerators		Home radio sets		Passenger cars	
	Number sold, in thou- sands	Aver- age retail price	Number sold, in thou- sands	Aver- age retail price	Number sold, in thou- sands	Aver- age retail price	Number sold, in thou- sands	Aver- age retail price	Number sold, in thou- sands	Aver- age retail price	Number sold, in thou- sands	Aver- age retail price	Factory sales, in thou- sands	Aver- age factory price
1900.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	4	\$1,169
1910.....	3 ¹	\$75 ¹	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	181	1,190
1915.....	13 ²	80 ²	.....	.....	.....	.....	370 ⁴	\$30 ⁴	.....	.....	.....	.....	896	643
1920.....	600	120	.....	.....	40	.....	1,024	50	5 ⁶	\$550 ⁶	100 ⁷	\$50 ⁷	1,906	949
1925.....	736	141	40	\$150	85	\$176	1,056	62	75	425	2,000	83	3,735	658
1929.....	956	113	126	76	173	165	1,253	50	778	292	4,428	136	4,587	621
1932.....	570	59	50	70	60	150	447	40	798	195	3,000	47	1,135	545
1937.....	1,465	72	179	70	405	134	1,210	56	2,310	171	8,065	56	3,916	588
1939.....	1,329	69	127	68	335	147	1,085	58	1,900	169	10,500	34	2,867	634
1940.....	1,455	72	175	58	450	140	1,341	55	2,600	152	11,800	38	3,692	656
1941.....	1,892	79	260	56	728	142	1,670	56	3,500	155	13,000	35	3,744	699
1942.....	449	91	66	73	225	...	580	61	520	...	4,400	35	221	786
1945.....	251 ³	...	30	...	74	...	258 ⁵	...	264	...	500	40	75	...
1946 ⁸	928	...	...	...	175	...	928	...	843	...	5,863	...	644 ⁹	...

¹1909. ²1914. ³Includes gas engine washers. ⁴1918. ⁵Includes hand cleaners. ⁶1921. ⁷1922. ⁸Manufacturers' shipments for first 6 months. ⁹Production.



Utilities, 1943

(all money figures in millions of dollars)

Source: Federal Communications Commission, Federal Power Commission.

Utility	Investment in plant	Operating revenues	Net income	Employees Number Compensation (in thousands)	
Telephone systems.....	5,745	1,734	194	368	752
Transit industry*.....	4,259	1,294	.....	238	550
Standard broadcast stations and networks....	42	228	66	32	82
Electric utilities.....	14,844	2,971	502	.....	.....
Steam railways.....	26,145	9,138	1,371	1,375	3,521

*Excludes taxicabs and suburban railroads. Includes electric railways, trolley coaches, and motor busses.

Wood Pulp, Paper and Paperboard, and Lumber Production

Source: U. S. Bureau of the Census and U. S. Forest Service.

Year	Wood pulp (in thou- sands of short tons)	Paper and paperboard (in thousands of short tons)	Lumber (in millions of board feet)
1919.....	3,518	6,098	34,552
1929.....	4,863	11,140	36,886
1932.....	3,760	7,998	10,151
1939.....	6,993	13,510	24,975
1940*	8,695	14,484	31,170
1941.....	10,011	17,934	36,540
1942.....	10,264	17,084	36,332
1943.....	9,060	17,036	34,289
1944.....	9,446	17,183	32,553
1945.....	9,471	17,374	27,356
1946†.....	4,843	9,423	15,733

*Coverage for wood pulp increased in 1940 and for paper and paperboard in 1941.

†Average for first 6 months, not adjusted for seasonal variation.

Aircraft Production*

Source: Automotive and Aviation Industries.

	Number			Value‡ (in thousands of dollars)
	Civil†	Military†	Total	
1919.....			662	8,046
1927.....	1,565	621	1,995	14,505
1929.....	5,357	677	6,631	51,508
1933.....	591	466	1,179	15,860
1937.....	2,281	949	3,100	38,664
1939.....	3,770	2,141	5,911	75,873
1940.....	6,785	6,019	12,871	146,000
1941.....	6,844	19,433	26,277	819,000
1942.....	985	47,653	48,638	2,762,000
1943.....		85,405	85,405	6,696,000
1944.....		95,237	95,237	9,233,000
1945.....		46,819	46,819	5,141,000
1946†.....	13,311	606	13,917	298,361

*Includes airplanes, seaplanes and amphibians.

†Do not add up to totals because of difference in sources. ‡Values of engines, propellers and power plant accessories not included for 1933 and subsequent years. †First six months.

Number of Houses Built*

Source: U. S. Bureau of Labor Statistics, National Bureau of Economic Research.

	Nonfarm houses
1919.....	330,000
1920.....	247,000
1922.....	716,000
1925.....	937,000
1929.....	509,000
1933.....	93,000
1939.....	515,000
1940.....	603,000
1941.....	715,000
1942.....	497,000
1943.....	351,000
1944.....	169,000
1945.....	225,000
1946 (first 6 months).....	225,000

*Data, except for 1946, represents new dwelling units started which in former years approximated buildings completed. For 1946, estimates are of buildings actually completed.

Nonferrous Metal Production (in short tons)

Source: Copper Institute, Zinc Institute, American Bureau of Metal Statistics, and U. S. Bureau of Mines.

Year	Aluminum (primary)	Copper (smelter output from domestic ore)	Zinc (primary smelter produced from domestic ore)	Refined lead (from domestic ores; anti- monial lead excluded)
1919...	64,238	643,210	452,272	424,433
1921...	27,266	252,793	198,232	398,222
1929...	113,986	1,001,432	612,136	672,498
1930...	114,518	697,195	489,361	573,740
1933...	42,562	225,000	306,010	259,616
1934...	37,088	244,227	355,366	299,841
1937...	146,340	834,661	551,165	443,142
1939...	163,545	712,675	491,058	420,967
1940...	206,280	909,084	589,988	433,065
1941...	309,067	966,072	652,590	470,517
1942...	521,106	1,087,991	629,957	467,367
1943...	920,179	1,092,939	594,250	406,544
1944...	776,446	1,003,379	574,253	394,443
1945...	500,000	794,000	504,900	382,000

Fisheries—Summary for the United States: 1942

Source: U. S. Department of the Interior.

Section	Fishermen	Fishing vessels	Fishing boats	Products	
				(Quantity in thousands of pounds)	(Value, in thousands of dollars)
New England states.....	15,044	658	6,726	705,962	36,293.6
Middle Atlantic states.....	6,547	366	3,699	319,193	12,468.2
Chesapeake Bay states.....	10,679	291	6,942	202,240	10,061.0
South Atlantic and Gulf states ¹ ..	27,941	1,145	15,049	575,533	14,644.9
Pacific Coast states.....	21,047	1,586	6,903	1,374,688	49,244.1
Lake states.....	15,142	1,499	11,785	75,246	8,629.5
Mississippi River states ²	15,884		14,546	82,383	2,897.3
Alaska.....	8,564	838	3,323	522,179	17,933.6
Total.....	110,848	5,383	58,973	3,857,424	152,172.2

¹Figures for 1940.

²Figures for 1931.

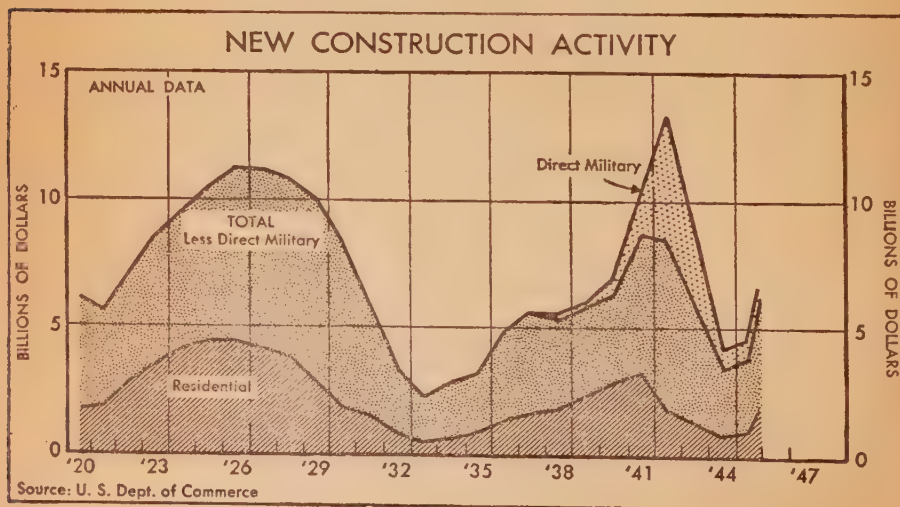
Construction Activity, Continental United States (in millions of dollars)

Source: U. S. Department of Commerce.

Item	1929	1933	1940	1942	1944	1945	1946*
Private construction:							
Residential (excluding farms).....	2,797	278	2,355	1,315	535	670	1,357
Nonresidential.....	2,822	404	1,028	635	350	1,014	1,503
Industrial†.....	949	176	442	346	208	642	734
Warehouses, office and loft buildings.....	581	41	85	57	16	52	114
Stores, restaurants and garages.....	516	86	257	93	39	147	431
Other nonresidential.....	776	101	244	139	87	173	229
Farm construction:	279	69	236	271	213	191	120
Residential.....	147	43	127	144	136	116	.....
Nonresidential.....	132	26	109	127	77	75	.....
Public utility.....	1,624	254	580	687	648	672	370
Railroad.....	510	94	167	197	247	264	120
Telephone and telegraph.....	354	45	122	155	83	117	118
Other public utility.....	760	115	291	335	318	291	132
Total private construction.....	7,522	1,005	4,199	2,908	1,746	2,547	3,355
Public construction:							
Residential.....	.....	.....	205	600	190	71	52
Nonresidential.....	622	193	497	3,742	879	822	142
Industrial†.....	.....	2	144	3,571	748	640	41
Educational.....	367	43	130	86	41	59	38
Hospital and institutional.....	95	43	55	29	58	85	43
Other nonresidential.....	160	105	168	56	32	38	20
Military and naval.....	19	36	510	5,060	720	562	87
Highway.....	1,248	675	896	664	360	302	210
Sewer and water.....	253	81	194	139	79	97	61
Miscellaneous public service enterprises.....	150	61	90	36	46	55	34
Conservation and development.....	86	168	325	360	163	130	88
All other federal.....	13	4	22	55	14	11	15
Total public construction.....	2,391	1,218	2,739	10,656	2,451	2,050	689
Total new construction.....	9,913	2,223	6,938	13,564	4,197	4,597	4,044
Work Relief.....	.....	114	805	291	.....	.....	.....
Maintenance.....	3,854	2,028	3,646	3,892	4,399	4,771	.....
Total construction activity.....	13,767	4,365	11,389	17,747	8,596	9,368	.....

*Total for first 6 months.

†Public industrial building not segregable from private construction in 1929.



Section V

WHAT FARMERS PRODUCE

The United States is universally recognized as the industrial giant of the world. Less well known is the fact that it is also by far the leading nation in agricultural output.

There is every reason to believe that this substantial margin of leadership will continue, even expand. For a technological and scientific revolution is taking place in agriculture which may well be fully as important—and as dislocating—as the industrial revolution of the 18th and 19th centuries. This revolution on the farm involves the greater use of more efficient machinery, the better application of chemical fertilizers and insecticides, the introduction of greatly improved strains of seed, and the beginnings of the new industry of "chemical farming."

A foretaste of this technological progress took place during World War II. Production of all farm commodities went up about 25 percent at the same time that the farm population was dropping almost 20 percent. More machinery made it possible for the average size of American farms to increase about 15 percent.

These are over-all averages. There are extremes which indicate even more sensational possibilities. On the few very large farms which have so far been completely mechanized and operated along mass-production lines, only one-third to one-fifth the amount of labor formerly used is required to produce the same yields.

Such scientific progress solves some problems for the farmer but creates even more complicated problems for society as a whole. Where in a mechanized industrial civilization, itself steadily increasing in efficiency, are the millions that will be displaced by farm mechanization to find jobs?

This section presents part of the statistical framework for these and other agricultural problems. Other portions of that framework will be found in Section IX on "How We Work," Section X on "What We Earn," and Section XII, "What Living Costs Us."

Population, Farms, and Farm Property

Source: U. S. Bureau of the Census.

Item	1850	1910	1920	1925	1930	1940	1945
Farm population (thousands).....			31,614	*	30,445	30,546	26,220†
Number of farms (thousands).....	1,449	6,361	6,448	6,371	6,288	6,096	5,877
All land in farms (million acres).....	293	878	955	924	986	1,060	1,148
Average acreage per farm.....	202.6	138.1	148.2	145.1	156.9	174.0	195.4
Value of farm property (millions of dollars)	3,967	40,837	77,923	57,017	56,975	41,254	.....
Land.....		28,475	54,829	37,721	34,929	23,236	.....
Buildings.....		6,325	11,486	11,746	12,949	10,405	.....
Implements and machinery.....	151	1,265	3,594	2,691	3,301	3,060	.....
Livestock.....	544	4,771	8,012	4,858	5,794	4,553	.....
Total population (thousands).....	23,191	91,972	105,710	114,035	122,775	131,669	125,150†
Urban.....		42,166	54,304	61,451	68,954	74,423	74,570
Rural.....		49,806	51,406	52,584	53,820	57,245	50,580

*Data are not strictly comparable with figures for other years.

†1944.

‡Excluding armed services.

Production of Agricultural Commodities by Kind

Source: U. S. Dept. of Agriculture.

Year	Corn, 1,000 bushels	Wheat, 1,000 bushels	Rice, (clean) 1,000 pounds	Sugar		Cotton 1,000 bales of 500 lbs.	Tobacco, 1,000 pounds
				Beet (chiefly refined) 1,000 pounds	Cane (chiefly raw) 1,000 pounds		
1929.....	2,515,937	824,183	1,098,167	2,036,000	436,000	14,825	1,532,676
1934.....	1,448,920	526,052	1,084,639	2,320,000	534,000	9,636	1,084,589
1939.....	2,580,912	741,180	1,501,722	3,286,000	1,008,000	11,817	1,880,793
1940.....	2,462,320	813,305	1,512,028	3,546,000	664,000	12,566	1,462,080
1941.....	2,675,790	943,127	1,425,639	2,968,000	838,000	10,744	1,262,049
1942.....	3,131,518	974,176	1,793,028	3,226,000	920,000	12,817	1,408,717
1943.....	3,034,354	841,023	1,801,194	1,866,000	996,000	11,427	1,406,196
1944.....	3,203,310	1,092,177	1,951,028	1,974,000	874,000	12,230	1,956,022
1945.....	3,018,410	1,123,143	2,085,000	2,456,000	1,042,000	9,195	2,041,811

Domestic Animals on Farms—Number and Value

Source: U. S. Department of Agriculture.

Jan. 1:	Number (thousands)							Value of all animals except chickens and turkeys (millions of dollars)
	Horses	Mules	Dairy cows	Sheep	Swine	Chickens	Turkeys	
1940.....	10,442	4,039	24,926	46,558	61,115	438,288	8,569	4,814
1941.....	10,214	3,922	25,478	47,804	54,256	422,909	7,252	4,986
1942.....	9,907	3,813	26,398	49,807	60,377	474,910	7,623	6,566
1943.....	9,675	3,704	27,106	48,796	73,736	540,798	6,704	8,883
1944.....	9,302	3,531	27,656	51,769	83,852	576,441	7,572	8,822
1945.....	8,841	3,405	27,674	47,780	59,759	511,130	7,491	8,181
1946.....	8,259	3,196	26,785	44,241	62,344	525,536	8,734	8,923

Farm Production—Indexes of Volume by Major Groups of Products

(1935-1939=100)

Source: U. S. Department of Agriculture.

Year	All groups	Crops						Livestock and Livestock Products			
		Total	Food grains	Fruits and nuts	Vegetables except truck crops	Truck crops	Cotton and cotton-seed	Total	Meat animals	Dairy products	Poultry and eggs
1931...	102	104	114	98	98	83	128	100	103	96	101
1932...	96	92	92	82	100	79	98	99	101	97	99
1933...	96	85	69	81	93	76	98	103	108	98	100
1934...	93	72	64	86	101	88	74	106	117	98	96
1935...	91	89	81	95	104	92	81	93	90	98	92
1936...	94	82	79	81	88	96	95	101	103	99	99
1937...	106	117	115	113	107	102	144	98	96	99	101
1938...	103	105	124	100	102	104	91	102	102	102	101
1939...	106	107	101	111	99	106	89	106	109	102	108
1940...	110	107	110	110	101	111	95	112	118	105	109
1941...	113	109	131	113	100	116	83	115	118	110	116
1942...	124	121	139	117	104	129	98	126	132	114	131
1943...	128	114	116	107	125	124	87	137	150	113	152
1944...	136	128	148	123	106	137	94	141	155	115	153
1945...	132	123	156	112	111	142	68	138	145	120	155

Civilian Consumption of Principal Foods

(in pounds per capita)

Source: U. S. Bureau of Agricultural Economics.

Foods	1935-39 avg.	1944	1945	Foods	1935-39 avg.	1944	1945
Red meats.....	126	150	130	Fresh vegetables.....	235	254	264
Poultry meats.....	21	27	29	Processed vegetables†...	32	35	44
Eggs*.....	298	351	390	Potatoes, sweetpotatoes..	153	147	151
Fluid milk and cream...	340	423	438	Sugar.....	97	89	73
Cheese.....	5.5	5.0	5.7	Corn products.....	39	46	47
Butter.....	17	12	11	Wheat flour.....	153	161	164
Fats and oilst.....	31	33	31	Coffee.....	14	16	17
Fresh fruits.....	138	145	146	Tea.....	0.7	0.5	0.7
Processed fruitst.....	26	27	34	Cocoa.....	4.4	3.6	3.9

*Number, not pounds.

†Excludes butter.

‡Pack year.

Agricultural Output by States—1945 Crops

Wheat, corn, oats, barley, potatoes in thousands of bushels; cotton lint in thousands of 500 lb. gross weight bales; tobacco in thousands of pounds.

	Wheat	Corn	Oats	Barley	Cotton lint	Potatoes	Tobacco
Alabama	240	50,626	5,275	114	935	5,200	141,560
Arizona	504	437	384	2,652	125	1,658	.....
Arkansas	441	35,511	8,208	119	1,080	2,730	.....
California	10,416	2,112	5,115	41,608	370	37,280	.....
Colorado	34,627	16,588	7,245	19,551	.....	19,110	.....
Connecticut	.....	2,150	116	.....	.....	3,344	22,989
Delaware	1,306	4,224	124	300	.....	333	.....
District of Columbia	.....	.....	.....	.....	.....	.....	.....
Florida	.....	6,900	480	.....	8	5,285	20,413
Georgia	2,613	48,678	15,000	171	665	2,002	108,035
Idaho	30,696	1,334	6,806	11,840	.....	44,220	.....
Illinois	25,656	391,390	158,102	842	.....	2,604	.....
Indiana	35,896	235,956	59,682	816	.....	3,915	13,540
Iowa	2,745	508,106	214,440	84	.....	3,960	.....
Kansas	207,961	72,864	17,668	6,702	.....	1,476	300
Kentucky	5,278	77,824	1,725	1,170	.....	3,999	469,395
Louisiana	.....	23,140	4,248	.....	395	2,655	192
Maine	36	600	2,916	84	.....	52,785	.....
Maryland	6,864	16,872	960	1,918	.....	2,108	21,600
Massachusetts	.....	1,634	186	.....	.....	2,788	8,460
Michigan	27,688	61,915	64,400	3,906	.....	18,700	.....
Minnesota	21,508	217,248	242,640	13,224	.....	19,360	910
Mississippi	378	50,660	13,671	338	1,615	1,904	325
Missouri	22,518	105,840	31,161	1,463	155	2,992	6,800
Montana	57,726	2,010	9,486	13,248	.....	2,016	.....
Nebraska	85,212	258,304	74,120	13,420	.....	12,075	.....
Nevada	388	64	273	640	.....	780	.....
New Hampshire	.....	546	252	.....	.....	986	.....
New Jersey	1,323	8,010	925	180	.....	12,567	.....
New Mexico	2,328	2,400	682	550	107	450	.....
New York	9,365	22,968	20,822	2,200	.....	28,970	1,000
North Carolina	6,216	55,650	9,128	840	430	9,240	819,790
North Dakota	161,888	26,950	82,484	53,760	.....	23,660	.....
Ohio	60,993	176,913	53,210	630	.....	7,130	21,274
Oklahoma	70,917	26,268	19,855	2,108	295	1,155	.....
Oregon	20,889	1,384	7,818	6,402	.....	11,340	.....
Pennsylvania	20,194	59,576	24,583	3,150	.....	16,724	52,724
Rhode Island	.....	320	31	.....	.....	1,296	.....
South Carolina	2,912	23,414	16,023	166	675	2,480	139,520
South Dakota	52,572	118,668	147,963	32,900	.....	2,912	.....
Tennessee	5,325	66,204	4,416	1,728	495	3,440	.....
Texas	41,778	66,832	42,441	3,857	1,820	4,648	.....
Utah	6,858	792	1,833	6,750	.....	3,366	.....
Vermont	.....	2,442	1,302	88	.....	1,375	.....
Virginia	8,192	40,359	3,780	1,836	17	8,568	154,077
Washington	63,213	1,450	7,040	5,670	.....	11,880	.....
West Virginia	1,768	12,996	1,750	230	.....	2,880	3,795
Wisconsin	1,500	109,839	152,337	3,600	.....	12,160	35,112
Wyoming	4,215	1,442	4,557	3,106	.....	2,625	.....
Not separately shown	.....	.....	.....	.....	8	.....	.....
Total	1,123,143	3,018,410	1,547,663	263,961	9,195	425,131	2,041,811

Output Per Worker in Agriculture
(1939=100)

(in thousands)			
	Number	Percent of total farms	
			1909..... 66.3
			1919..... 81.1
			1929..... 91.5
			1933..... 89.1
1880.....	1,025	25.6	1934..... 76.5
1890.....	1,295	28.4	1940..... 103.2
1900.....	2,025	35.3	1941..... 107.4
1910.....	2,355	37.0	1942..... 118.9
1920.....	2,455	38.1	1943..... 116.8
1930.....	2,664	42.4	1944..... 124.5
1940.....	2,361	38.7	1945..... 122.2

Sources: U. S. Depts. of Agriculture, Commerce, and Labor.

Section VI

WHAT COMMERCE DISTRIBUTES

More than half of the consumer's dollar goes for distribution, less than half of it for production. That is the conclusion of a study by the Twentieth Century Fund, which showed that in 1929 only 41 cents of every dollar spent for goods paid for the services of production, while 59 cents went for the services of distribution. Other investigations confirm this finding that at least 50 percent of the sales price of goods goes for distribution.

These figures are not primarily a sign of the economic waste that can be attributed to elements of American business. They are rather a token of the intricate character of distribution in a mass-production economy. Concealed in them is a significant difference between production and distribution costs. When industrial output rises, production costs per unit almost always decline; but distribution costs frequently increase.

However, since the jump in unit distribution costs is almost invariably less than the drop in unit production costs, the ultimate cost of the product to the final user is still less than it would be at lower levels of output. Whenever this is the case, higher unit distribution costs are still worth while.

Distribution's share of the consumer dollar includes the costs of various business services like advertising and insurance, which are treated in the following section. The present section, deals only with transportation and with wholesale and retail trade. Foreign trade information and statistics will be found in another part of the Almanac.

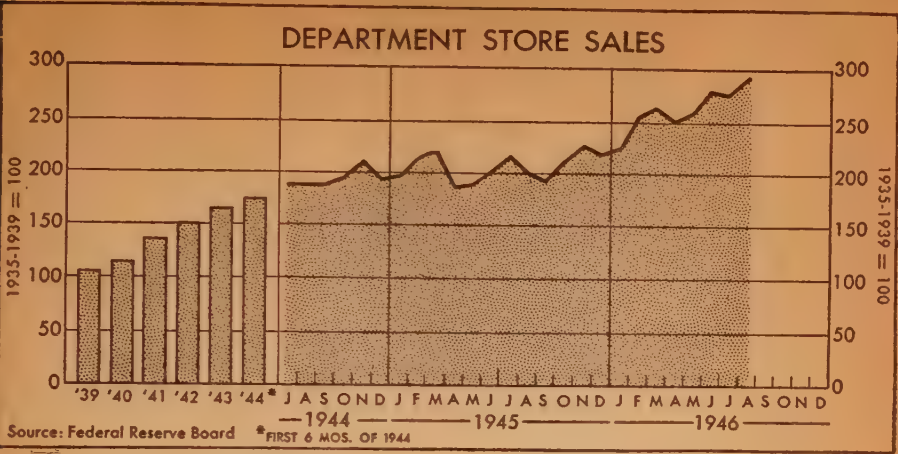
Retail Sales by Kind-of-Business Groups

(in millions of dollars)

Source: U. S. Bureau of the Census.

Kind-of-Business Group	1929	1933	1935	1939	1940	1941	1944	1945	1946*
Durable goods stores	14,180	4,844	7,626	10,379	12,418	15,604	9,967	11,498	8,017
Automotive group	7,043	2,368	4,237	5,549	6,862	8,544	2,912	3,356	2,638
Motor vehicle dealers	6,444	2,142	3,863	5,025	6,286	7,794	2,062	2,293	1,940
Parts and accessories	599	226	374	524	576	750	850	1,063	697
Building materials and hardware group	3,846	1,342	1,864	2,735	3,108	3,862	3,620	4,182	2,838
Building materials	2,621	854	1,105	1,761	2,000	2,435	2,171	2,508	1,760
Farm implements	519	177	292	345	399	524	442	497	306
Hardware	706	311	467	629	709	903	1,007	1,177	772
Home furnishings group	2,755	959	1,290	1,733	2,022	2,611	2,453	2,889	2,020
Furniture and house furnishings	1,813	646	852	1,200	1,392	1,787	1,950	2,221	1,478
Household appliances and radios	942	313	438	533	630	824	503	668	542
Jewelry	536	175	235	362	426	587	982	1,071	522
Nondurable goods stores	34,279	19,673	25,165	31,663	33,970	39,886	59,517	65,074	35,916
Apparel group	4,241	1,930	2,656	3,259	3,441	4,157	6,869	7,685	4,154
Men's clothing and furnishings	1,358	542	727	840	886	1,096	1,618	1,806	968
Women's apparel and accessories	1,480	754	1,026	1,323	1,413	1,690	3,193	3,589	1,944
Family and other apparel	596	209	392	479	503	605	986	1,093	557
Shoes	807	425	511	617	639	766	1,072	1,197	684
Drug stores	1,690	1,066	1,233	1,563	1,637	1,821	2,812	3,023	1,697
Eating and drinking places	2,125	1,430	2,391	3,520	3,874	4,796	9,351	10,809	5,810
Food group	10,967	6,776	8,362	10,165	10,906	12,576	18,989	20,192	11,225
Grocery and combination	7,353	5,004	6,352	7,722	8,317	9,604	14,511	15,328	8,478
Other food	3,614	1,772	2,010	2,443	2,589	2,972	4,478	4,864	2,747
Filling stations	1,787	1,532	1,968	2,822	2,954	3,454	2,603	3,016	1,781
General merchandise group	9,015	4,982	5,730	6,475	6,847	7,931	10,854	11,614	6,376
Department, including mail order	4,350	2,538	3,311	3,975	4,266	5,027	6,764	7,428	4,209
General, incl. gen. mdse., with food	2,710	1,176	1,110	922	910	991	1,388	1,417	766
Other general mdse. and dry goods	1,051	590	528	601	636	738	1,208	1,249	649
Variety	904	678	781	977	1,035	1,175	1,494	1,520	749
Other retail stores	4,454	1,957	2,825	3,859	4,311	5,151	8,040	8,735	4,870
Feed and farm supply	1,119	463	599	779	885	1,101	2,273	2,379	1,343
Fuel and ice	1,013	623	859	1,014	1,140	1,260	1,603	1,671	848
Liquor .....	.....	17	328	586	650	767	1,485	1,688	875
Book stores, news dealers, stationery	360	159	174	205	223	274	.....	.....	.....
Cigar stores	410	190	183	208	212	244	.....	.....	.....
Florists	176	66	99	149	164	194	2,679	2,997	1,804
Office equipment and supplies	324	112	144	208	255	346	.....	.....	.....
Other	1,052	327	439	710	782	965	.....	.....	.....
All retail stores	48,459	24,517	32,791	42,042	46,388	55,490	69,484	76,572	43,933

*Total for first 6 months, not adjusted for seasonal variation.



Leading Retail Outlets

Source: Moody's Manual of Industrials.

	1945 sales* (in thousands)
Department Stores	
J. C. Penney Co.....	\$ 549,149
Allied Stores Corp.....	241,924
R. H. Macy & Co., Inc.....	197,414
Gimbel Bros., Inc.....	194,552
Federated Department Stores.....	187,426
May Department Stores Co.....	181,727
Marshall Field & Co.....	161,894
Variety Stores	
F. W. Woolworth Co.....	477,136
S. S. Kresge Co.....	223,254
W. T. Grant Co.....	175,580
S. H. Kress & Co.....	126,039
J. J. Newberry Co.....	100,869
G. C. Murphy Co.....	95,905
McCrory Stores Corp.....	71,282

Grocery Stores	
Atlantic & Pacific Tea Co.....	1,401,643
Safeway Stores, Inc.....	664,772
Kroger Co.....	457,333
American Stores Co.....	233,542
First National Stores, Inc.....	170,237

Drug Stores	
United-Rexall Drug, Inc.....	158,183
Walgreen Co.....	119,175
People's Drug Store, Inc.....	36,124

Mail Order Houses	
Sears-Roebuck & Co.....	988,770
Montgomery Ward & Co.....	620,969
Spiegel, Inc.....	70,554

*For accounting year ending in 1945.

Of the total retail sales of \$42 billion in 1939, independent stores accounted for 74.7 percent; chains, 21.7 percent; mail order houses, 1.3 percent; state liquor stores, 0.6 percent; cooperatives, 0.5 percent; company stores, 0.4 percent; direct selling, 0.4 percent; and utility operated stores, 0.4 percent.

Mail Order House Sales*

(in millions of dollars)

Source: U. S. Department of Commerce.

1929.....	447
1933.....	220
1937.....	467
1939.....	464
1940.....	489
1941.....	617
1942.....	622
1943.....	578
1944.....	603
1945.....	600
1946†.....	411

*Catalogue sales of chains only. Sales of retail stores owned by mail-order companies included in department store statistics.

†First 6 months, not adjusted for seasonal variation.

During 1945, 63 percent of department store sales were made for cash, 33 percent on charge accounts and 4 percent on instalment.

Does Distribution Cost Too Much?

(in millions of dollars)

Source: The Journal of Marketing, April 1946

	Value added			
	1939 sales	Total	By production	By distribution
Mines, quarries and oil wells.....	3,185	2,285	2,035	250
Timber products.....	1,122	618	394	224
Farming (excl. Gov't payments).....	7,877	6,313	5,289	1,024
Construction.....	4,520	2,473	2,134	339
Manufacturing.....	56,643	24,683	19,019	5,664
Transportation.....	5,115	3,639	.....	3,639
Wholesalers.....	55,266	6,100	.....	6,100
Retailers.....	42,042	12,192	.....	12,192
Total.....	175,770	58,303	28,871	29,432
Percentages.....	.....	100.0	49.5	50.5

Sales of Wholesalers (in millions of dollars)

Source: U. S. Department of Commerce.

Kind of business	1929	1933	1937	1940	1941	1943	1944	1945
Nondurable goods establishments.....	49,217	24,216	41,585	43,431	55,801	78,098	82,292	83,640
Beers, wines, and liquors.....	21	220	1,716	1,817	2,240	3,496	4,022	4,278
Chemicals (industrial).....	493	272	595	*	*	989	973	1,017
Clothing and furnishings.....	2,100	965	1,645	1,710	2,221	2,829	2,908	2,821
Coal and coke.....	1,160	631	1,049	1,251	1,661	2,315	2,625	2,368
Drugs and sundries.....	771	446	790	897	1,082	1,492	1,599	1,710
Dry goods.....	3,797	2,125	3,133	3,497	4,924	7,303	7,150	6,505
Farm products, raw materials.....	11,717	3,869	7,647	7,016	9,637	17,460	17,951	18,081
Food.....	17,402	9,326	13,451	13,881	16,679	23,372	24,161	25,213
Paper and its products.....	1,133	592	995	1,134	1,549	1,757	1,751	1,765
Petroleum and its products.....	3,234	2,159	4,018	4,324	5,380	5,197	6,177	6,579
Tobacco and its products.....	1,647	1,247	1,726	1,983	2,206	2,816	2,778	2,894
All other wholesalers.....	5,744	2,366	4,821	5,921	8,222	9,072	10,197	10,409
Durable goods establishments.....	17,768	5,794	15,001	18,324	27,800	21,192	21,111	21,746
Automotive.....	2,250	866	2,785	3,727	4,609	1,860	2,281	2,742
Electrical goods.....	2,423	674	1,877	2,156	3,489	2,574	2,467	2,805
Furniture and housefurnishings.....	970	350	632	717	1,079	1,029	615	565
Hardware.....	866	391	681	790	1,125	1,167	1,223	1,286
Lumber and building materials.....	3,269	936	2,333	3,042	4,367	4,237	4,084	4,074
Jewelry and optical goods.....	495	147	416	415	555	626	616	624
Machinery and metals (excluding scrap).....	7,498	2,430	6,277	7,477	12,576	9,699	9,825	9,650
All wholesalers.....	66,984	30,010	56,586	61,755	83,601	99,290	103,403	105,386

*Included in all other wholesalers.

Transportation Trends (1935-39=100)

Source: U. S. Department of Commerce.

Class	1929	1932	1937	1939	1941	1943	1944	1945	1946*
Total.....	118	73	110	106	142	213	223	217	195
Commodity.....	116	70	111	107	147	216	208	199	177
Passenger.....	122	83	107	103	126	274	272	274	255
Air.....	20	31	98	142	259	424	581	821	886
Commodity.....	35	39	103	132	205	576	787	1019	640
Passenger.....	10	25	94	148	294	324	445	690	1048
Railroads.....	140	74	112	104	145	240	247	231	189
Commodity.....	140	73	112	104	146	219	223	206	170
Passenger.....	141	76	113	103	133	399	433	419	331
Intercity motor.....	62	68	106	112	165	225	228	226	242
Local transit.....	128	92	103	101	112	172	179	181	181
Oil and gas pipeline.....	58	55	115	110	129	192	251	255	200
Waterborne (domestic).....	87	58	112	113	124	59	68	77	114

*Average for first 6 months, adjusted for seasonal variation.

Monthly Average Railroad Carloadings (in thousands of cars)

Source: Association of American Railroads.

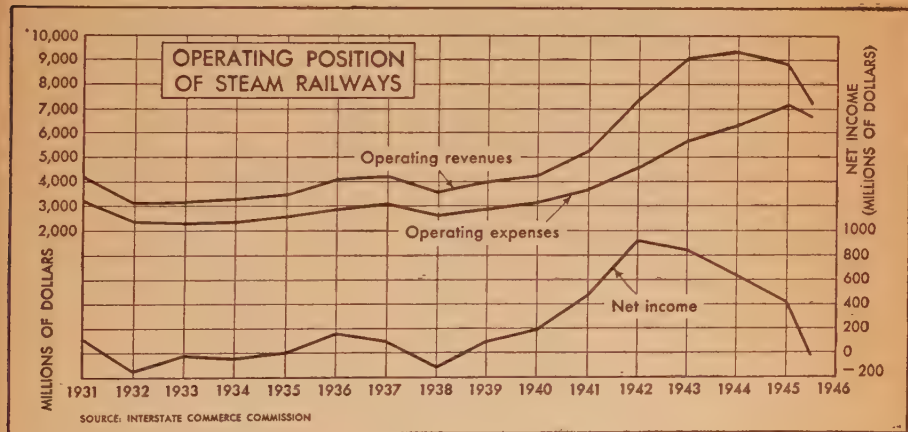
Year	Total	Coal, coke, and ore	Forest products	Grains and products	Livestock	Less-than- carload merchandise	Miscel- laneous
1920.....	3,760	1,095	255	154	129	751	1,376
1929.....	4,402	1,001	271	200	118	1,100	1,712
1932.....	2,348	482	75	138	79	756	820
1939.....	2,826	676	132	162	58	653	1,146
1941.....	3,524	913	182	169	54	670	1,536
1942.....	3,568	1,008	204	181	62	465	1,646
1943.....	3,535	1,001	187	222	70	423	1,632
1944.....	3,674	1,043	192	213	75	459	1,691
1945.....	3,492	955	170	228	74	461	1,604
1946*.....	3,170	733	175	195	69	524	1,474

*First 6 months.

Steam Railways

Source: Association of American Railroads and the Interstate Commerce Commission.

	1901 to 1910	1920	1930	1935	1940	1944
Av. first-track mileage operated (thousands).....	217,727	259,941	260,443	252,930	245,740	240,215
Passengers carried (thousands).....	783,132	1,269,913	707,987	448,059	456,088	915,817
Passenger revenue (thousand dollars).....	491,712	1,304,815	730,766	358,423	417,955	1,793,322
Average journey per passenger (miles).....	31.43	37.30	37.96	41.31	52.22	104.46
Total tons revenue freight carried (thousands).....	1,469,872	2,427,622	2,179,015	1,502,590	1,947,479	3,156,484
Freight revenue (thousand dollars).....	1,521,619	4,420,833	4,145,015	2,831,139	3,584,201	7,087,033
Operating revenues (thousand dollars).....	2,191,427	6,301,151	5,356,484	3,499,126	4,354,712	9,524,628
Operating expenses (thousand dollars).....	1,466,140	5,954,394	3,993,621	2,630,177	3,131,598	6,345,035
Net railways operating income (thousand dollars).....	651,124	12,101	874,154	505,415	690,554	1,113,153
Net capitalization (million dollars).....	11,962	16,994	19,066	18,342	17,630	16,276
Average number of employees (all carriers).....	1,366,423	.....	1,571,559	1,052,634	1,091,692	1,498,627
Total compensation per year (thousand dollars).....	.....	.....	.....	1,730,370	2,079,107	4,069,100
Roads under receivership and trusteeship.....	35	61	30	87	103	76
Miles of roads under rec. and trusteeship.....	4,049	16,290	9,486	68,345	75,270	50,497
Number of locomotives—Dec. 31 (thousands).....	.....	68,942	60,189	49,541	44,333	46,305
Number of freight-train cars—Dec. 31 (thousands).....	.....	2,388,424	2,322,267	1,867,381	1,684,171	1,797,012
Number of pass.-train cars—Dec. 31 (thousands).....	.....	56,102	53,584	42,426	38,308	38,217



Section VII

WHAT SERVICES CONTRIBUTE

Manufacturing and agriculture can grow steadily more efficient only because they take advantage of various types of business, professional and scientific services. For example, mass production would be impossible without modern accounting systems; and large-scale agriculture would be almost out of the question without scientific crop and weather services.

At the same time, the service elements in our economy are every bit as indebted to manufacturing and agriculture. Only as production grows more efficient and requires less and less labor per unit of output can the economy support more and more services.

Not only do service activities make business more efficient. They also substantially enrich the American standard of living; give employment to well over ten million persons; and provide a "last frontier" for hundreds of thousands of independent small businesses. Thus, contrary to the gloomy predictions of many nineteenth century economists—both radical and conservative—the growth of industrial civilization has meant the expansion and not the contraction of the so-called middle classes who furnish many of the services described in this section.

SERVICE ESTABLISHMENTS BY GROUPS AND KIND OF BUSINESS, 1939

Source: U. S. Department of Commerce.

Kind of business	Number of establishments	Receipts (thousands of dollars)	Active proprietors of unincorporated businesses	Employees, full- and part-time (average for year)	Pay roll (thousands of dollars)
Personal services:					
Barber shops.....	117,998	230,983	124,596	68,786	55,557
Barber and beauty shops.....	4,199	18,618	4,821	9,289	7,321
Baths and masseurs' establishments (Turkish, etc.).....	1,600	5,979	1,557	2,106	1,648
Beauty parlors.....	83,071	231,670	85,419	99,296	74,496
Cleaning, dyeing, pressing, alteration, and repair shops.....	52,516	140,578	52,398	29,662	21,478
Cleaning and dyeing plants.....	11,604	182,698	11,845	82,810	80,014
Cleaning and renovating hats.....	1,288	4,374	1,366	1,531	1,015
Costume and dress-suit rental agencies.....	417	4,070	387	1,003	1,321
Funeral directors, embalmers, and crematories.....	18,196	261,617	18,239	32,843	40,676
Fur repair and storage shops.....	2,180	12,676	2,166	2,270	2,294
Laundries, hand.....	15,245	45,783	17,498	11,667	7,515
Laundries, power, total.....	6,773	453,579	5,174	249,008	233,606
Linen supply service without laundry facilities.....	718	28,391	346	5,287	7,941
Photographic studios.....	10,957	64,185	10,417	14,579	15,690
Rug cleaning establishments.....	1,012	10,618	949	3,429	3,968
Shoe repair shops.....	50,115	106,737	49,695	18,194	13,349
Shoe shine parlors.....	7,968	8,210	8,064	2,896	1,133
Travel bureaus (including ticket agents and brokers).....	741	9,173	624	1,656	2,753
Other personal services.....	3,061	8,972	2,942	2,525	2,184
Business services:					
Adjustment and credit bureaus, and collection agencies.....	2,576	48,135	1,732	18,548	23,238
Advertising agencies.....	1,628	97,372	1,070	16,636	53,546
Auctioneers' establishments (service only).....	970	5,213	996	3,201	1,659
Billboard advertising service.....	679	46,844	386	8,688	14,836
Blueprinting and photostat laboratories.....	500	12,961	387	3,093	3,978
Booking agents' offices (theatrical, etc.).....	520	10,545	461	1,538	3,863
Coin-operated machine rental and repair service.....	1,554	30,576	1,606	4,177	5,852
Cotton compresses.....	315	29,183	4	13,591	9,677
Court reporting and public stenographic agencies.....	1,329	4,767	1,341	780	891
Dental laboratories.....	2,080	26,759	2,208	6,826	9,106
Detective agencies.....	280	4,128	184	2,559	2,677
Disinfecting and exterminating service.....	952	11,143	748	3,640	4,606
Duplicating, addressing, mailing, and mailing list service.....	1,433	17,582	1,404	8,324	7,050
Employment agencies.....	1,424	7,861	1,419	1,990	2,777
Photo finishing laboratories.....	1,201	16,111	1,180	4,661	4,561
Sign painting shops.....	5,391	16,803	5,741	3,311	3,488
Window cleaning service.....	823	11,781	869	6,316	6,895
Window display service.....	215	3,059	192	884	1,199
Other business services.....	4,772	148,211	3,472	52,165	61,428
Services allied to transportation:					
Packing and crating service.....	110	3,146	79	1,671	1,213
Stevedoring service.....	198	53,701	34	54,796	38,612
Stockyard service.....	95	15,674	59	3,586	4,922
Warehousing, cold storage.....	908	29,870	539	7,149	9,923
Warehousing, cotton.....	453	4,953	261	1,892	1,337
Warehousing, farm products.....	291	6,810	99	2,441	2,670
Warehousing, other.....	1,752	50,713	738	20,341	23,930
Weighing service.....	140	2,136	122	1,328	1,103
Other services allied to transportation.....	119	5,134	21	2,421	2,596
Automotive repairs and services:					
Automobile brake repair shops.....	487	4,876	500	896	1,162
Automobile laundries.....	960	2,941	987	1,490	889
Automobile paint shops.....	1,300	6,220	1,466	1,705	1,731
Automobile radiator shops.....	1,089	4,631	1,133	895	982
Automobile rental service.....	648	20,251	380	3,919	5,393
Automobile repair shops (general).....	51,827	228,214	55,389	42,919	43,461
Automobile storage garages.....	4,821	70,315	3,844	15,990	18,193
Automobile top and body repair shops.....	6,232	44,678	7,067	11,905	13,683
Battery and ignition repair shops.....	2,073	10,228	2,201	1,643	1,597
Parking lots.....	6,274	31,755	4,282	8,470	6,961
Tire repair shops.....	2,215	8,222	2,363	1,178	1,064

(continued)	Number of establishments	Receipts (thousands of dollars)	Proprietors (except corporate)	Employees (average for year)	Pay roll (thousands of dollars)
Kind of business					
Wheel, axle, and spring repair shops.....	413	5,040	424	1,092	1,572
Other automotive repairs.....	542	3,521	548	723	826
Other repair services (except automobile, apparel, and shoes):					
Armature rewinding shops.....	978	12,873	1,033	3,090	3,783
Bicycle repair shops.....	1,601	3,435	1,621	479	307
Blacksmith shops.....	16,797	22,567	17,266	3,632	2,627
Boat repair shops.....	464	3,418	451	1,043	1,227
Electrical appliance repair shops.....	3,615	16,926	3,732	3,149	3,496
Harness and leather goods repair shops.....	2,168	3,809	2,178	349	249
Locksmith and gunsmith shops.....	2,252	5,261	2,248	736	722
Musical instrument repair shops.....	461	1,033	476	100	109
Piano and organ tuning and repair service.....	521	913	536	116	122
Radio repair shops.....	10,732	21,687	11,000	2,591	2,004
Refrigerator service and repair shops.....	1,297	9,222	1,410	1,846	2,338
Saw and tool sharpening and repair shops.....	1,451	3,875	1,501	679	882
Stove repair shops.....	365	977	380	200	173
Typewriter repair shops.....	618	2,322	643	433	423
Upholstery and furniture repair shops.....	9,685	35,095	10,261	7,202	6,915
Watch, clock, and jewelry repair shops.....	12,485	29,902	12,530	2,803	2,946
Sewing machine repair shops.....	355	1,058	361	118	136
Other repair services.....	6,749	24,079	6,895	4,994	5,647
Custom industries:					
Awning and tent manufacturing.....	942	6,872	903	1,667	1,626
Bookbinding establishments.....	314	1,018	340	310	246
Bottling works.....	705	2,031	722	499	328
Cabinetmaking shops (including woodworking).....	2,882	6,430	3,049	1,201	976
Cider mills and presses.....	241	177	244	50	23
Custom slaughtering establishments.....	268	356	285	151	83
Grist mills.....	9,217	9,872	7,777	3,512	1,099
Hemstitching, embroidering, and button-holing shops.....	808	1,846	842	677	404
Machine shops.....	3,117	9,056	3,354	2,100	1,855
Mattress renovating and repair shops.....	1,386	5,524	1,473	1,350	967
Metal plating shops.....	379	1,469	412	397	389
Neon sign manufacturing.....	359	3,156	360	670	901
Printing and publishing shops.....	13,570	35,351	13,835	9,046	5,441
Sawmills and planing mills.....	12,775	19,605	13,097	21,516	6,320
Tinsmith shops.....	1,483	3,999	1,547	827	606
Tire retreading shops.....	863	11,621	860	1,957	2,142
Wearing apparel contract work shops.....	518	1,501	604	953	536
Welding shops.....	4,118	16,102	4,357	3,203	3,437
Other custom and manufacturing industries.....	11,908	35,154	11,356	12,183	7,964
Miscellaneous services:					
Circulating libraries.....	783	3,067	709	505	435
Interior decorating service.....	461	4,365	454	663	783
Landscape gardening and tree surgery service.....	1,148	13,574	1,194	5,369	5,789
Livery stables.....	201	1,204	195	360	275
Taxidermists.....	363	853	364	171	197
Other miscellaneous services.....	3,377	36,788	3,197	10,935	13,853
All kinds of business, total.....	646,028	3,420,417	652,491	1,102,047	1,069,887

Distribution of Box-office Receipts of Motion Picture Theaters, 1941

Source: U. S. Department of Commerce.

(in millions of dollars)

Estimated gross box-office receipts.....	1,000
Distribution of gross box-office receipts.....	650
Retained by local motion picture theater for pay roll.....	160
Real estate (rent, insurance, taxes, interest, and depreciation).....	200
Local advertising and publicity.....	80
Light, heat, and cooling.....	80
Other expenses.....	130
Amount paid out to the distributor.....	350
Wholesale distributor.....	100
Studios for producing the film.....	250

Places of Amusement—Summary, 1939

Source: U. S. Bureau of the Census.

Kind of business	Number of establishments	Receipts (thousands of dollars)	Active proprietors of unincorporated businesses	Employees, full-time and part-time (averages for year)*	Pay roll (thousands of dollars)*
Amusement devices.....	1,093	7,314	705	1,600	1,504
Amusement parks.....	245	10,123	148	3,798	2,997
Bands and orchestras.....	550	4,946	831	3,467	3,654
Bathing beaches (not including municipal).....	344	1,994	264	682	534
Bicycle rentals.....	247	433	247	76	46
Billiard and pool parlors.....	12,998	38,631	12,773	9,261	5,892
Boat and canoe rental service.....	1,382	1,944	1,341	413	276
Bowling alleys.....	4,646	48,819	4,037	31,557	17,347
Clubs, baseball (professional).....	276	24,940	36	6,430	10,942
Dance halls, studios, and academies.....	2,191	14,156	2,029	8,128	4,498
Race tracks, automobile.....	36	978	24	337	132
Race tracks, dog.....	11	2,775	3	314	720
Race tracks, horse.....	45	40,732	3	3,795	7,312
Riding academies.....	840	2,875	765	1,108	777
Shooting galleries.....	324	850	255	207	160
Skating rinks, ice.....	59	1,693	24	493	503
Skating rinks, roller.....	1,134	6,550	1,088	2,624	1,641
Sports and athletic fields.....	78	5,845	35	1,354	1,355
Sports promoters.....	110	3,409	78	1,623	575
Swimming pools (not including municipal).....	668	2,815	516	1,009	712
Theaters, motion-picture (including motion-picture theaters with vaudeville).....	15,115	673,045	6,717	125,184	131,583
Theaters, legitimate stage and opera; and theatrical productions.....	231	32,461	83	4,579	11,459
Other places of amusement.....	2,294	70,751	1,969	15,190	20,862
Total.....	44,917	998,079	33,971	223,229	225,481

*Employees and pay roll include paid executives of corporations but not the number and compensation of proprietors of unincorporated businesses.

Advertising Trends

1935-1939=100

Source: Printers' Ink.

	Total	Farm papers	Magazines	News-papers	Out-door	Radio
1921	111.3	....	80.9	120.6	....	....
1929	149.1	192.0	148.4	146.1	170.8	29.4
1933	75.9	60.8	69.7	82.0	65.3	48.3
1939	97.2	94.4	93.1	95.5	109.1	124.7
1940	100.1	91.5	97.3	97.3	112.1	144.6
1941	104.5	93.1	100.4	101.0	124.3	159.8
1942	104.5	87.9	94.1	95.7	104.2	173.6
1943	122.7	126.5	121.9	107.7	101.2	231.2
1944	130.7	150.4	154.1	104.6	133.5	288.9
1945	137.3	164.4	180.2	107.1	172.7	288.1
1946*	154.1	163.4	182.8	125.7	195.4	292.8

*First 6 months.

Advertising Media, 1939

Source: Federal Trade Commission.

	Percent-ages of total
Radio.....	18.3
National magazines.....	17.4
Newspapers.....	15.2
Miscellaneous.....	13.3
Material furnished dealers.....	13.0
Outdoor posters.....	7.3
Joint advertising.....	6.4
Letters, folders, mailed by manufacturer.....	5.7
Trade journals.....	2.6
Indoor posters.....	.8
Total.....	100.0

Hotels

Source: Horwath & Horwath.

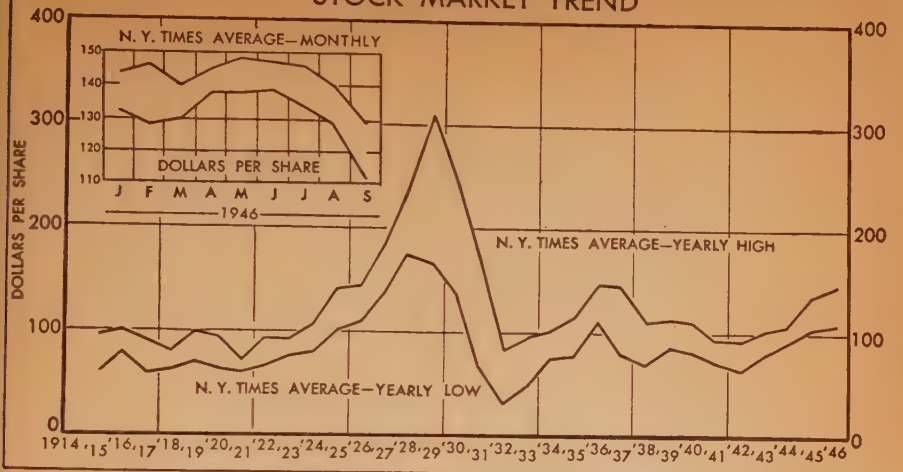
Year	Percent of rooms occupied	Average sale per occupied room (\$)	Restaurants (1929=100)
1929	70	4.04	100
1933	51	2.88	49
1939	62	3.31	90
1945	91	4.06	200

Domestic Servants Statistics

Source: National Bureau of Economic Research.

	Number (in thousands)	Per 1,000 families	Per 1,000 population
1900.....	1,509	94.3	19.8
1910.....	1,867	93.1	20.3
1920.....	1,485	61.3	14.0
1930.....	2,025	67.7	16.5
1940.....	2,098	60.2	15.9

STOCK MARKET TREND



New York Stock Exchange Sales

From *Com. and Financial Chronicle*.

Year	Stocks, millions of shares	Bonds, par val. (millions of dollars)			
		Total	Corporate	U. S. government	State, municipal, foreign
1919.....	317	3,809	622	29.01	286
1929.....	1,125	2,982	2,182	142	658
1932.....	425	2,967	1,642	570	755
1932.....	262	2,046	1,480	311	255
1940.....	208	1,669	1,414	39	216
1941.....	171	2,112	1,929	20	163
1942.....	126	2,311	2,181	7	124
1943.....	279	3,255	3,130	4	120
1944.....	263	2,695	2,585	6	104
1945.....	378	2,262	†	8	†
1946*.....	195	722	†	17	†

*First 6 months. †Breakdown not available.

Securities Listed

on
New York Stock Exchange

(in millions of dollars)

Source: New York Stock Exchange.

Jan. 1	Bonds		Stocks		Jan. 1	Bonds		Stocks	
	Market value	Shares (mil-lions)	Market value	Market value		Market value	Shares (mil-lions)	Market value	Market value
1933	31,918	1,312	22,768		1943	70,584	1,471	38,812	
1939	47,053	1,424	47,491		1944	90,274	1,489	47,607	
1940	49,920	1,435	46,468		1945	112,621	1,492	55,512	
1941	50,831	1,455	41,891		1946	143,111	1,592	73,765	
1942	55,034	1,463	35,786						

Stock Prices per Share—Dow-Jones & Co., Inc., and New York Times Averages

(in dollars)

Year	Dow-Jones & Co., Inc.				New York Times		
	Total (65)	Industrials (30)	Public utilities (15)	Railroads (20)	Total (50)	Industrials (25)	Railroads (25)
1929.....	125.43	311.24	104.48	159.66	251.08	366.29	135.87
1932.....	26.82	64.57	26.89	27.46	57.81	93.63	21.99
1937.....	58.08	166.36	28.17	49.51	121.57	204.60	38.55
1938.....	43.10	132.44	20.46	26.73	93.67	166.52	20.84
1939.....	48.01	142.66	24.43	30.01	102.05	181.40	22.71
1940.....	45.28	134.74	22.61	28.50	98.52	175.92	21.12
1941.....	41.22	121.82	18.02	28.36	87.94	154.33	20.73
1942.....	36.04	107.20	12.63	26.38	74.09	128.96	19.36
1943.....	46.39	134.81	19.82	33.71	93.28	160.60	25.98
1944.....	51.39	143.32	23.99	40.33	99.86	168.90	30.72
1945.....	63.72	169.81	32.15	56.56	120.45	197.23	43.51
1946*.....	75.62	202.10	41.47	64.88	140.27	229.86	50.68

*First 6 months.

Stock and Bond Yields—Percent

Year	Bonds							Stocks				
	U. S. Treasury (Treasury Dept.)*	Municipal (Bond Buyer) (20)	Corporate (Moody's Investors' Service)				Municipal (Standard and Poor's Corp.) (15)	Preferred (Standard and Poor's Corp.) (15)	Common (Moody's Investors' Service)			
			Total	Industrial	Railroad	Public utility			Total (200)†	Industrial (125)	Railroad (25)	Public utility (25)
1926	3.68	4.14	5.21	5.37	5.13	5.11	4.08	5.78				
1929	3.60	4.31	5.21	5.31	5.18	5.14	4.27	5.12	3.5	4.0	4.4	2.6
1932	3.68	4.77	6.87	6.71	7.61	6.30	4.65	6.13	7.4	7.3	6.3	8.0
1939	2.41	2.82	3.77	3.30	4.53	3.48	2.76	4.17	4.2	3.9	3.7	5.5
1940	2.26	2.52	3.55	3.10	4.30	3.25	2.50	4.14	5.3	5.3	5.4	5.7
1941	2.05	2.15	3.34	2.95	3.95	3.11	2.10	4.08	6.2	6.3	6.5	6.6
1942	2.09	2.25	3.34	2.96	3.96	3.11	2.36	4.31	6.6	6.4	7.7	7.9
1943	1.98	1.90	3.16	2.85	3.64	2.99	2.06	4.06	4.8	4.5	6.9	5.8
1944	1.92	1.64	3.05	2.80	3.39	2.96	1.86	3.99	4.7	4.6	6.7	5.4
1945	1.66	1.49	2.87	2.68	3.06	2.89	1.67	3.70	4.1	4.0	5.5	4.6
1946†	\$	1.34	2.69	2.57	2.83	2.67	1.52	3.47	3.6	3.4	4.9	3.9

*Partly tax-exempt, due or callable in 15 years or over.

†Average of first 6 months.

†Includes 15 banks and 10 insurance stocks.

§After Dec. 15, 1945 no such bonds existed.

Note: Figures in parentheses represent number of issues.

Open Market Rates in New York City (Percent per annum)

Source: Federal Reserve Board.

Year	Prime commercial paper, 4 to 6 months*	Prime bankers' acceptances, 90 days*	Stock exchange time loans, 90 days*	Stock exchange call loans, renewals†	United States Treasury bills 3 months†
1920	7.50	6.06	8.06	7.74	....
1925	4.02	3.29	4.23	4.18	....
1929	5.85	5.03	7.75	7.61	....
1932	2.73	1.28	1.87	2.05	.879
1937	.94	.43	1.25	1.00	.447
1939	.59	.44	1.25	1.00	.023
1940	.56	.44	1.25	1.00	.014
1941	.54	.44	1.25	1.00	.103
1942	.66	.44	1.25	1.00	.326
1943	.69	.44	1.25	1.00	.373
1944	.73	.44	1.25	1.00	.375
1945	.75	.44	1.25	1.00	.375
1946†	.75	.45	1.25	1.00	.375

*Prevailing rate. †Average rate. ‡ First 6 months.

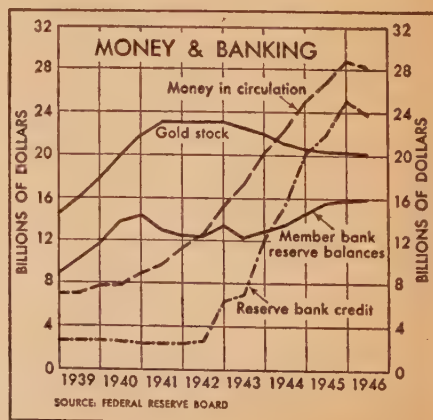
Commercial Loan Rates

(Percent per annum)

Source: Federal Reserve Board.

Year	New York City	7 northern and eastern cities	11 southern, and western cities
1929	5.76	5.82	5.93
1932	4.20	4.81	5.21
1937	1.73	2.88	3.25
1939	2.07	2.87	3.51
1940	2.04	2.56	3.38
1941	1.97	2.55	3.19
1942	2.07	2.58	3.26
1943	2.30	2.80	3.13
1944	2.11	2.68	3.02
1945	1.99	2.51	2.73
1946*	1.80	2.43	2.95

*Average of first 6 months.



Assets and Liabilities of All Active Banks in the United States, December 31, 1945

(in millions of dollars except number of banks)

Source: U. S. Treasury Department.

	All banks	National banks	State commercial banks	Mutual savings banks	Private banks
Number of banks.....	14,598	5,023	9,003	534	38
Loans and discounts.....	30,467	13,948	12,185	4,272	62
Investments.....	110,516	55,612	42,855	11,905	144
Cash and balances with other banks.....	35,615	20,179	14,772	608	55
Total assets.....	178,351	90,536	70,555	16,987	273
Capital, surplus, and undivided profits.....	10,612	4,656	4,343	1,590	23
Total deposits.....	166,530	85,243	65,695	15,355	238
Demand.....	120,437	68,858	51,351	12	216
Time.....	46,093	16,385	14,343	15,343	22

Federal Reserve System, All Member Banks, Principal Assets and Liabilities*

(all money figures in millions of dollars)

Source: Federal Reserve Board.

	1925	1930	1935	1940	1942	1943	1944	1945
Loans.....	21,996	23,870	12,175	15,321	16,088	16,288	18,676	22,775
U. S. Gov't obligations.....	3,728	4,125	12,268	15,823	37,546	52,948	67,686	78,339
Other security investments.....	5,160	6,864	5,541	5,982	5,629	5,022	5,208	6,070
Total deposits†.....	34,250	37,029	38,454	56,430	78,277	92,262	110,917	129,670
Demand deposits.....	19,124	18,796	21,056	33,213	46,600	56,995	61,265	69,640
Time deposits.....	10,557	13,012	10,041	12,122	12,698	15,148	19,154	24,111
Capital accounts.....	4,678	6,593	5,145	5,698	6,101	6,475	6,968	7,589
Number of banks.....	9,489	8,052	6,387	6,486	6,679	6,738	6,814	6,884

*End of year. †Includes interbank deposits, domestic and foreign, and U. S. Government and Postal Savings deposits.

Bank Suspensions*Source: Board of Governors of the Federal Reserve System.*

Period	Number of banks					Deposits (in thousands of dollars)				
	Total	Na-tional	State mem-ber	Nonmember		Total	Na-tional	State mem-ber	Nonmember	
				Non-insured	Insured				Non-insured	Insured
1921-29.....	5,714	766	229	4,719	.....	1,625,468	363,324	128,677	1,133,467	.....
1930-33.....	9,106	1,947	363	6,796	.....	6,858,633	2,434,316	1,334,908	3,089,409	.....
1934-45.....	335	22	6	88	219	143,990	22,998	26,548	41,231	53,213

Bank Debits to Deposit Accounts (except interbank)*

(in millions of dollars)

Source: Board of Governors of Federal Reserve System.

1929.....	935,030	1937.....	433,043	1940.....	408,535	1943.....	715,782
1932.....	322,365	1938.....	373,522	1941.....	491,649	1944.....	807,939
1935.....	374,173	1939.....	389,677	1942.....	553,392	1945.....	884,303
						1946†.....	461,661

*Includes 141 leading cities.

†First 6 months.

Insurance Premiums and Losses (in thousands of dollars)

Source: *The Spectator*, Philadelphia, Pa., and the National Board of Fire Underwriters, New York, N. Y.

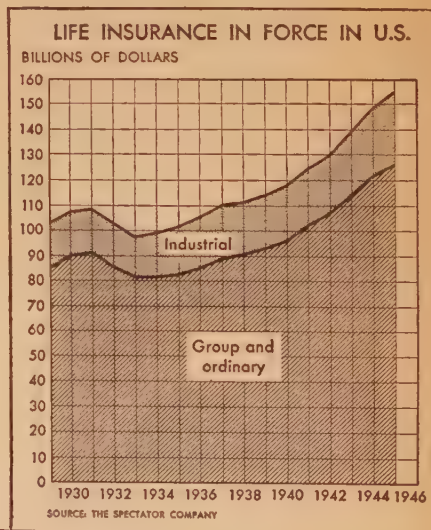
Type	1938	1939	1940	1941	1942	1943	1944	1945
Casualty, surety, and miscellaneous insurance companies								
Net premiums written...	1,163,127	1,191,838	1,274,255	1,471,908	1,651,031	1,703,797	1,525,586	1,631,649
Net losses paid.....	476,067	484,343	534,264	608,609	652,749	659,365	717,646	799,193
Fire and marine insurance business*								
Net premiums written...	959,559	907,003	1,129,016	1,309,680	1,396,282	1,334,491	1,421,904	1,555,935
Net losses paid.....	413,676	404,800	447,512	523,772	683,236	560,175	660,887	748,664
Total fire losses in United States.....	258,748	275,102	285,879	303,895	314,295	373,000	423,538	455,338

*U. S. and outlying territories and possessions.

Life Insurance — Summary of Financial Condition and Policy Account of U. S. Companies (in millions of dollars)

Source: *The Spectator*, Philadelphia, Pa.

Year	Assets (admitted) Dec. 31	Total income	Premium income	Payment to policyholders
1880...	453	81	.....	56
1890...	771	197	158	90
1900...	1,742	401	325	169
1910...	3,876	781	593	387
1920...	7,320	1,764	1,385	745
1929...	17,482	4,337	3,350	1,962
1932...	20,754	4,653	3,504	3,087
1939...	29,243	5,453	3,825	2,642
1940...	30,802	5,658	3,944	2,681
1941...	32,731	5,855	4,080	2,550
1942...	34,931	6,029	4,181	2,443
1943...	37,766	6,442	4,421	2,407
1944...	41,054	7,011	4,869	2,528
1945...	44,797	7,674	5,249	2,719



Section VIII

WHAT GOVERNMENT DOES AND COSTS

Ever since the Civil War, the role of government in the American economy has been steadily expanding. While probably more citizens have opposed this trend in the United States than in any other major nation, it has persisted. In the last two decades, first depression, and then war and its dislocations, have sharply accelerated the momentum of such government intervention.

The result is that in U. S. A. 1946, one-tenth of the working population is directly employed by federal, state or local governments. In addition, another tenth of the people at work owe their jobs in private business to government activities or expenditures. Combining the work of both groups, roughly one-fifth of the total national output of goods and services can be attributed to the activities of federal, state and local governments.

The costs of running the more than 165,000 government units in the nation are immense. The variety of uses to which the billions of dollars raised in taxes or by borrowing is put is bewildering. This section spreads the central facts and figures before you.

Receipts and Expenditures of the National Government

(In millions of dollars)

Source: U. S. Treasury Department.

Yearly average or year ended June 30	Ordinary expenditures								Ordinary receipts		Surplus (+) or deficit (-) ordinary receipts compared with expenditures with chargeable against them	
	Total	Civil and miscel- laneous	War Depart- ment	Navy Depart- ment	Indians	Pensions	Postal defi- ciencies	Interest on the public debt	Public debt reire- ments	Income and profits taxes		
										Total		Income and profits taxes
1789-1800.....	6	1	1	1	..	...	...	3	...	6	....	....
1801-1810.....	9	2	2	2	..	...	...	4	...	13	....	+4
1811-1820.....	24	3	11	5	..	...	...	5	...	21	....	-3
1821-1830.....	16	3	4	4	1	1	...	4	...	22	....	+6
1831-1840.....	24	6	8	5	3	3	...	...	...	30	....	+6
1841-1850.....	34	8	13	8	1	2	...	...	...	29	....	-6
1851-1860.....	60	21	16	12	3	2	4	3	...	60	....	....
1861-1865.....	684	26	548	65	3	5	2	35	...	161	28	-523
1866-1870.....	378	55	128	28	4	23	4	135	...	447	51	+70
1871-1875.....	287	69	40	23	8	30	6	111	...	337	8	+49
1876-1880.....	256	57	37	16	5	35	5	100	...	288	....	+33
1881-1885.....	258	68	43	16	7	58	2	64	...	367	....	+109
1886-1890.....	279	82	40	18	6	83	6	44	...	375	....	+96
1891-1895.....	364	97	50	29	11	140	7	29	...	353	....	-11
1896-1900.....	457	97	111	48	12	142	9	38	...	435	....	-23
1901-1905.....	536	130	133	86	12	140	6	28	...	559	....	+24
1910.....	694	172	190	123	19	161	8	21	...	676	21	-18
1915.....	761	201	202	142	22	164	7	23	...	698	80	-63
1917.....	1,978	1,144	378	240	31	160	...	25	...	1,124	360	-853
1918.....	12,698	6,144	4,870	1,279	31	181	2	190	1	3,665	2,314	-9,033
1919.....	18,523	6,628	9,009	2,002	35	222	...	619	8	5,152	3,019	-13,371
1920.....	6,482	2,771	1,622	736	41	213	...	1,020	79	6,695	3,945	+212
1929.....	3,848	1,471	426	365	34	230	95	678	550	4,033	2,331	+185
1933.....	4,325	2,015	435	349	23	235	117	689	462	2,080	746	-2,245
1937.....	8,281	5,651	628	557	37	396	42	866	104	5,029	2,163	-3,253
1938.....	7,304	4,592	644	596	33	403	44	926	65	5,855	2,640	-1,450
1939.....	8,765	5,894	695	673	47	417	41	941	58	5,165	2,189	-3,601
1940.....	9,127	5,651	907	891	38	429	41	1,041	129	5,387	2,125	-3,740
1941.....	12,775	4,851	3,939	2,313	34	433	30	1,111	64	7,607	3,470	-5,168
1942.....	32,491	7,750	14,326	8,580	32	431	18	1,260	95	12,799	7,960	-19,692
1943.....	78,182	12,475	42,526	20,888	25	442	15	1,808	3	22,282	16,094	-55,901
1944.....	93,744	14,661	49,438	26,538	31	495	+29	2,609	...	44,149	34,655	-49,594
1945.....	100,405	15,448	50,490	30,047	30	772	1	3,617	...	46,457	35,173	-53,948

Summary of Internal Revenue Collections (in millions of dollars)

Source: U. S. Treasury Department.

Fiscal year	1936	1937	1938	1939	1940	1941	1942	1943	1944	1945	1946
Total receipts from internal revenue.....	3,512	4,597	5,674	5,161	5,303	7,362	12,993	22,144	41,685	43,902	40,310
Adjustment to Daily Treasury Statement..	+19	-37	+30	-1	-20	+10	-37	-225	+1,565	+102	-362
Total internal revenue collections.....	3,494	4,634	5,644	5,162	5,323	7,352	13,030	22,369	40,120	43,800	40,672
Total income and profits taxes.....	1,427	2,180	2,629	2,185	2,130	3,471	8,007	16,299	33,028	35,062	31,258
Individual.....	674	1,092	1,286	1,029	982	1,418	3,263	6,630	18,261	19,034	18,705
Corporation income and excess profits	739	1,057	1,300	1,123	1,121	2,016	4,687	9,585	14,629	15,883	12,462
Miscellaneous profits taxes.....	15	31	43	34	27	37	57	84	137	144	91
Total employment taxes.....	266	743	740	834	926	1,185	1,499	1,738	1,779	1,701	1,701
Social Security taxes:											
Old-age insurance.....	207	503	530	605	687	895	1,132	1,290	1,308	1,238	1,238
Unemployment insurance.....	58	90	101	106	101	120	156	183	186	179	179
Railroad retirement.....	..	149	109	122	138	170	211	265	285	284	284
Total miscellaneous internal revenue.....	2,005	2,189	2,272	2,237	2,360	2,955	3,838	4,571	5,353	6,960	7,713
Capital stock tax.....	95	137	139	127	133	167	282	329	381	372	352
Estate and gift taxes.....	379	306	417	361	360	407	433	447	511	643	677
Alcoholic beverage taxes.....	505	594	568	588	624	820	1,048	1,423	1,618	2,310	2,526
Tobacco taxes.....	501	552	568	580	608	698	781	924	988	932	1,166
Stamp taxes.....	69	70	46	41	39	39	42	45	51	66	88
Manufacturers' and retailers' excise taxes.....	380	450	417	397	447	617	852	670	729	1,207	1,415
Miscellaneous taxes.....	76	80	118	144	149	207	401	732	1,075	1,430	1,490

1946-1947 Federal Budget (in billions)

Source: U. S. Treasury Department.

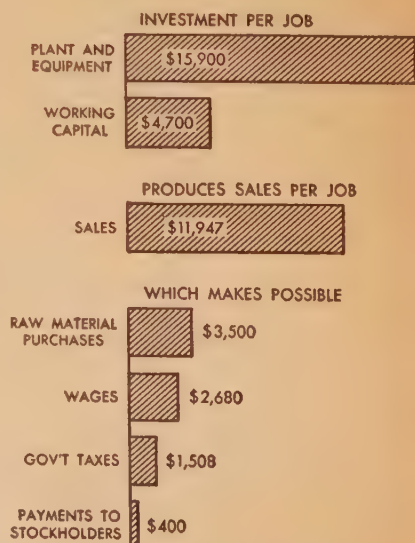
Budget receipts.....	1947
Budget expenditures:	39.6
National defense.....	18.5
Interest on the public debt.....	5.0
Refunds.....	1.8
Veterans' pensions and benefits.....	6.2
International finance.....	4.2
Aids to agriculture, including subsidies.....	1.2
Social security, relief, and retirement.....	1.2
General Government.....	1.9
Other.....	1.5
Total.....	41.5
Excess of Budget expenditures over receipts.....	1.9
Public debt at end of fiscal year.....	261.0

State Revenues and Expenditures (in millions of dollars)

Source: U. S. Bureau of the Census.

	1930	1940	1944
Total Revenues ...	2,030	3,613	4,498
Total Expenditures	2,155	3,372	3,588
Education	586	926	1,074
Highways	803	826	711
Hospitals	198	268	303

STORY OF A JOB*

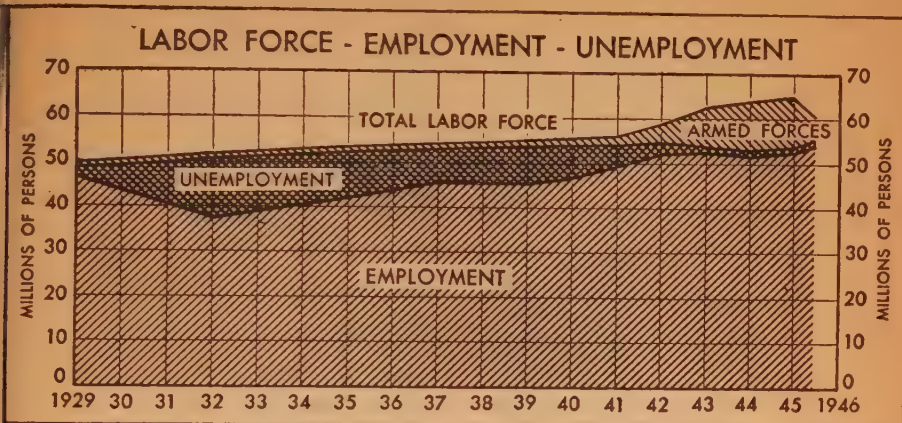


* Monsanto Chemical Company, 1945

Section IX

HOW WE WORK

Next to sleeping, man spends more time working than at anything else. The purpose of this section is to tell you at what, how long, how steadily and how efficiently American men, women and children work. It also shows you why workers stop work, how often they quit their job, how often industrial accidents occur, why and for how long workers strike, and how much time is lost from work stoppages.



Productivity and Unit Labor Cost in Selected Industries (1939=100)

Source: U. S. Bureau of Labor Statistics.

Industry	Output per man hour					Unit labor cost				
	1919	1929	1933	1941	1945	1919	1929	1933	1941	1945
Manufacturing										
Boots and shoes.....	64.3	77.7	88.0	113.2	110.6	150.2	139.5	94.7	102.6	150.8
Bread and bakery products.....	*	89.8	90.8	105.0	126.1	*	98.8	88.5	102.9	114.4
Cane-sugar refining.....	50.8	79.8	95.7	113.4	92.2	137.6	89.0	79.3	92.9	146.7
Canning and preserving.....	53.8	68.7	98.1	110.5	120.8	141.6	114.7	78.8	104.9	152.7
Cement.....	43.2	71.7	84.4	108.3	89.4	158.8	111.9	85.3	98.4	146.9
Coke.....	50.4	93.8	72.8	105.3	*	143.1	75.2	77.1	95.0	*
Confectionery.....	*	53.8	73.1	108.3	117.8	*	150.6	110.7	101.1	135.4
Cotton goods.....	58.2	68.4	74.7	102.7	100.7	156.4	121.7	95.4	116.2	174.4
Fertilizers.....	51.3	74.1	83.0	110.8	113.2	187.2	115.5	82.8	105.4	160.8
Flour and other grain mill products.....	55.9	87.0	93.5	100.3	93.0	146.5	112.0	88.5	106.4	160.3
Ice cream.....	39.7	54.6	58.8	127.0	153.1	217.4	209.2	168.0	84.7	95.1
Leather.....	47.0	65.9	74.6	110.0	115.4	169.8	127.1	102.4	101.8	132.0
Lumber and timber products.....	79.0	82.4	86.1	105.5	*	147.6	122.1	85.5	110.3	*
Newspaper and periodical printing and publishing.....	43.8	77.3	75.3	106.2	88.7	131.3	122.4	108.6	98.5	140.4
Nonferrous metals: primary smelters and refineries.....	45.7	89.5	88.5	103.1	95.9	181.0	101.4	77.5	111.5	155.9
Paints and varnishes.....	53.0	71.7	70.8	113.8	120.3	125.3	111.5	103.9	97.3	115.5
Paper and pulp.....	45.0	74.5	87.4	106.7	95.2	156.7	119.3	82.3	106.2	152.9
Rayon and allied products.....	*	30.4	60.7	127.2	151.0	*	233.6	106.3	89.2	97.2
Slaughtering and meat packing.....	58.8	79.1	91.6	101.2	111.0	141.7	105.3	75.2	107.8	126.4
Tobacco products.....	42.1	61.8	74.1	104.5	118.7	175.4	125.6	106.8	105.9	135.5
Woolen and worsted goods.....	62.9	70.8	86.3	*	118.2	124.4	123.0	88.4	*	144.3
Mining										
Anthracite.....	*	*	79.3†	105.7	99.6	*	*	110.4†	100.1	134.5
Bituminous.....	*	*	82.4†	105.8	119.6	*	*	98.9†	107.5	132.3
Steam railroad transportation.....	*	*	87.6†	115.5	139.5	*	*	103.7†	90.8	95.2
Electric light and power.....	42.6§	53.4	67.3	123.2	181.4	100.5§	138.5	113.9	85.9	71.6
Telephones.....	*	*	88.2†	99.5	99.6†	*	*	95.4†	99.5	114.2†
Telegraph.....	*	*	85.8†	92.9	105.5†	*	*	99.8†	109.0	130.0†

*Not available. †1935. ‡1944. §1917.

Age of Persons in the Labor Force (in thousands)

Source: U. S. Department of Commerce.

Age	1930		1940	
	Male	Female	Male	Female
14 to 19.....	2,795	1,591	2,619	1,395
20 to 24.....	4,747	2,316	5,035	2,688
25 to 44.....	17,498	4,404	18,817	6,107
45 to 64.....	10,173	1,842	11,954	2,550
65 and over.....	1,795	243	1,859	275
Total, 14 and over	37,008	10,396	40,284	13,015

Women Employed in the Labor Force (in thousands)

Source: U. S. Bureau of the Census.

	Female workers	Total workers	Female workers as % of total
1900.....	5,114	28,283	18.1
1910.....	7,789	37,271	20.9
1920.....	8,430	41,236	20.4
1930.....	10,679	48,595	22.0
1940.....	11,330	48,010	23.6
1941.....	12,740	51,310	24.8
1942.....	14,630	54,340	26.9
1943.....	18,080	54,750	33.0
1944.....	18,590	54,000	34.4
1945.....	18,280	52,660	34.7
1946.....	19,610	54,270	36.1
1946.....	16,890	58,130	29.1

NOTE: Data prior to 1940 refers to gainful workers.
From 1940 on, data is as of July.

Length of Working Time Required per Consumption Good, 1937

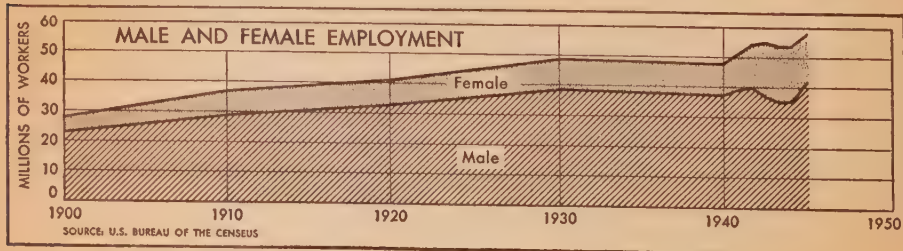
Source: Gerard Swope, *Atlantic Monthly*,
March, 1938.

Item	United States	Eight European countries	
		Range	Average
Year's rent (months).....	2.2	2.1- 3.9	2.8
Milk, butter, bread, eggs, beef (hours).....	1.7	4.3- 7.3	5.7
Automobile (months).....	4.5	8.5-24.0	16.3
Electric refrigerator (months).....	1.0	2.4- 7.3	3.7
Radio (months).....	.2	.4- 1.5	.8
Kilowatt-hour of energy (minutes).....	3.6	12.0-43.0	24.1
Incandescent lamp (hours)....	.2	1.2- 3.4	2.0

Occupations of Labor Force, 1940 (in thousands of persons)

Source: U. S. Department of Commerce.

All occupations.....	52,020
Professional and semiprofessional workers.....	3,558
Actors and actresses.....	19
Architects.....	22
Artists and art teachers.....	62
Authors, editors, and reporters.....	78
Chemists, assayers, and metallurgists.....	60
Clergymen.....	140
College presidents, professors, and instructors..	76
Dentists.....	71
Engineers.....	262
Lawyers and judges.....	180
Musicians and music teachers.....	162
Osteopaths.....	6
Pharmacists.....	83
Physicians and surgeons.....	166
Social and welfare workers.....	75
Teachers, not elsewhere classified.....	1,076
Trained nurses and student nurses.....	371
Veterinarians.....	11
Librarians.....	39
Dancers, showmen, and athletes.....	54
Designers and draftsmen.....	112
Aviators.....	6
Chiropractors.....	11
Optometrists.....	10
Photographers.....	38
Radio and wireless operators.....	12
Religious workers.....	35
Farmers and farm managers.....	5,303
Proprietors, managers, and officials, excl. farms..	3,854
Postmasters, and misc. gov't officials.....	240
Clerical, sales, and kindred workers.....	8,270
Bookkeepers, accountants, and cashiers.....	931
Stenographers, typists, and secretaries.....	1,175
Insurance agents and brokers.....	249
Traveling salesmen and sales agents.....	633
Craftsmen, foremen, and kindred workers.....	5,952
Carpenters.....	766
Electricians.....	227
Foremen, not elsewhere classified.....	576
Machinists, millwrights, and tool makers.....	662
Mechanics and repairmen.....	974
Painters, paperhangers, and glaziers.....	480
Operatives and kindred workers.....	9,477
Domestic service workers.....	2,349
Protective service workers.....	715
Firemen, fire department.....	79
Policemen, sheriffs, and marshals.....	177
Service workers, except domestic and protective..	3,116
Barbers, beauticians, and manicurists.....	440
Charwomen, janitors, and porters.....	631
Waiters and bartenders.....	733
Farm laborers and foremen.....	3,531
Laborers, excl. farm and mine.....	4,612



Employment and Unemployment (in millions of persons)

Source: U. S. Bureau of Labor Statistics, U. S. Bureau of the Census, and U. S. Bureau of Agricultural Economics.

Note: Data prior to 1940 estimated by Research Institute of America from various Government sources.

	1929	1932	1935	1939	1940	1941	1942	1943	1944	1945*	1946**
Total employment.....	46.7	37.9	41.9	45.1	46.4	49.0	52.1	52.6	51.8	52.4	53.8
Non-agricultural employment.....	36.8	28.3	32.1	36.1	37.1	40.4	43.5	44.3	43.7	44.0	45.7
Manufacturing.....	10.5	6.8	8.9	10.1	10.9	13.0	15.1	16.9	16.1	13.9	12.2
Mining.....	1.1	.7	.9	.8	.9	.9	1.0	.9	.8	.8	.7
Construction.....	2.1	1.0	1.2	1.8	1.7	2.2	2.1	1.3	.7	.8	1.5
Transportation and public utilities...	3.9	2.8	2.8	2.9	3.0	3.2	3.4	3.6	3.8	3.8	3.9
Trade.....	6.2	4.9	5.6	6.6	6.9	7.4	7.3	7.0	7.0	7.2	7.6
Financial, service and misc.....	4.2	3.5	3.8	4.2	4.3	4.4	4.4	4.1	4.3	4.6	5.1
Government.....	3.1	3.2	3.4	4.0	4.1	4.4	5.2	5.9	5.9	5.9	5.5
Other, self-employed, domestic.....	5.7	5.4	5.5	5.7	5.2	4.7	5.1	4.6	5.0	7.0	9.2
Agricultural employment.....	9.9	9.6	9.8	9.4	9.3	8.6	8.6	8.3	8.1	8.4	8.1
Unemployment.....	2.0	12.7	10.3	8.0	7.5	5.0	2.4	1.1	.8	1.1	2.5
Public works.....	..	..	2.5	3.0	2.5	1.9	.8	†	..	..	..
Total civilian labor force.....	48.7	50.6	52.2	53.5	53.8	54.0	54.5	53.7	52.6	53.5	56.3
Armed forces.....	.3	.3	.3	.4	.6	1.6	3.9	8.8	11.3	11.4	4.3
Total labor force.....	49.0	50.9	52.5	53.9	54.4	55.6	58.4	62.5	63.9	64.9	60.6

*New series, first 6 months estimated.

†Negligible.

**Average of first six months.

Labor Turnover in Manufacturing Establishments

Source: U. S. Bureau of Labor Statistics.

Monthly Average Rate Per 100 Employees

	1929*	1932	1933	1937	1939	1941	1942	1943	1944	1945	1946†
Accession rate.....	5.7	3.3	5.4	3.6	4.1	5.4	7.6	7.5	6.1	6.3	7.0
Separation rate.....	6.3	4.3	3.8	4.4	3.1	3.9	6.5	7.3	6.8	8.3	6.3
Discharges.....	.8	.2	.2	.2	.1	.3	.4	.6	.6	.6	.4
Layoffs.....	2.1	3.5	2.7	3.0	2.2	1.3	1.1	.6	.6	2.3	1.6
Quits.....	3.4	.7	.9	1.3	.8	2.0	3.8	5.2	5.1	5.1	4.1
Miscellaneous‡.....	..	..	..	..	..	.4	1.3	.9	.5	.3	.2

*Average for 7 months, June-December.

†First 6 months' average.

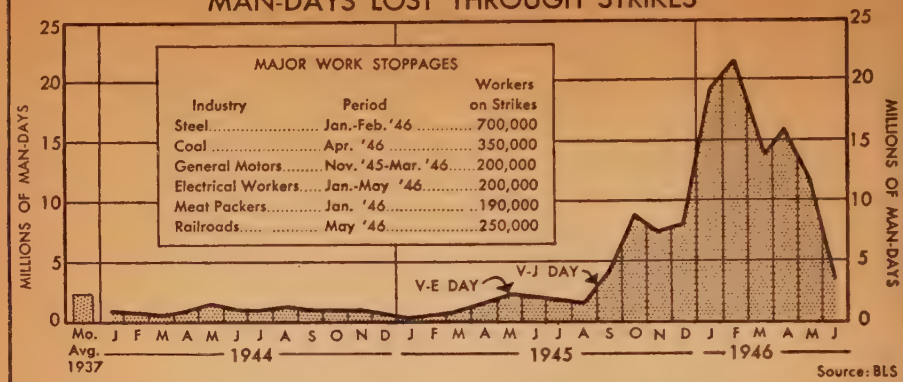
‡Includes separations caused by death, permanent disability, retirement on pension, and extended leave. Beginning September 1940, workers leaving to enter the Army or Navy are included. Prior to January 1940, miscellaneous separations were combined with data for quits.

Industrial Accidents (in thousands)

Source: U. S. Bureau of Labor Statistics.

	Total disabling injuries					
	1936	1939	1941	1942	1944	1945
Manufacturing.....	312	286	453	635	787	575
Trade—Wholesale and retail.....	133	201	297	284	274	296
Public utilities.....	14	21	21	21	19	20
Construction.....	284	405	500	350	100	112
Railroads.....	38	35	48	61	92	94
Miscellaneous transportation.....	28	54	130	137	135	140
Mining and quarrying.....	103	91	97	103	92	82
Miscellaneous services.....	232	254	368	394	419	378
Agriculture.....	265	257	270	284	312	306
All industries.....	1,407	1,604	2,180	2,268	2,230	2,003

MAN-DAYS LOST THROUGH STRIKES



Strikes and Lockouts

Source:

U. S. Bureau of Labor Statistics.

Year	Strikes and lockouts Number	Workers involved Number (thousands)	Man-days idle Number (thousands)
1881	477	130	n.a.
1885	695	258	n.a.
1890	1,897	373	n.a.
1895	1,255	407	n.a.
1900	1,839	568	n.a.
1905	2,186	302	n.a.
1915	1,593	n.a.	n.a.
1916	3,789	1,600	n.a.
1917	4,450	1,227	n.a.
1918	3,353	1,240	n.a.
1919	3,630	4,160	n.a.
1920	3,411	1,463	n.a.
1921	2,385	1,099	n.a.
1922	1,112	1,613	n.a.
1923	1,553	757	n.a.
1924	1,249	655	n.a.
1925	1,301	428	n.a.
1926	1,035	330	n.a.
1927	707	330	26,219
1928	604	314	12,632
1929	921	289	5,352
1930	637	183	3,317
1931	810	342	6,893
1932	841	324	10,502
1933	1,695	1,168	16,872
1934	1,856	1,467	19,592
1935	2,014	1,117	15,456
1936	2,172	789	13,902
1937	4,740	1,861	28,425
1938	2,772	688	9,148
1939	2,613	1,171	17,812
1940	2,508	577	6,701
1941	4,288	2,363	23,048
1942	2,968	840	4,183
1943	3,752	1,981	13,501
1944	4,956	2,116	8,721
1945	4,750	3,467	38,025
1946*	2,145	2,945	85,500

n.a. = not available.

*First six months.

Why Strikes?

Source: U. S. Bureau of Labor Statistics.

Major issues	Percentage of total strikes 1945
Wages and hours	42.4
Union organization, wages and hours	7.9
Union organization	12.6
Recognition	5.0
Strengthening bargaining position	1.2
Closed or union shop	2.7
Discrimination	2.9
Other	.8
Other working conditions	32.7
Job security	14.6
Shop conditions and policies	14.6
Work load	2.8
Other	.7
Interunion or intraunion matters	4.2
Sympathy	.6
Union rivalry or factionalism	1.7
Jurisdiction	1.6
Other	.3
Not reported	.2
All issues	100.0

Results of Strikes in 1945

Source: U. S. Bureau of Labor Statistics.

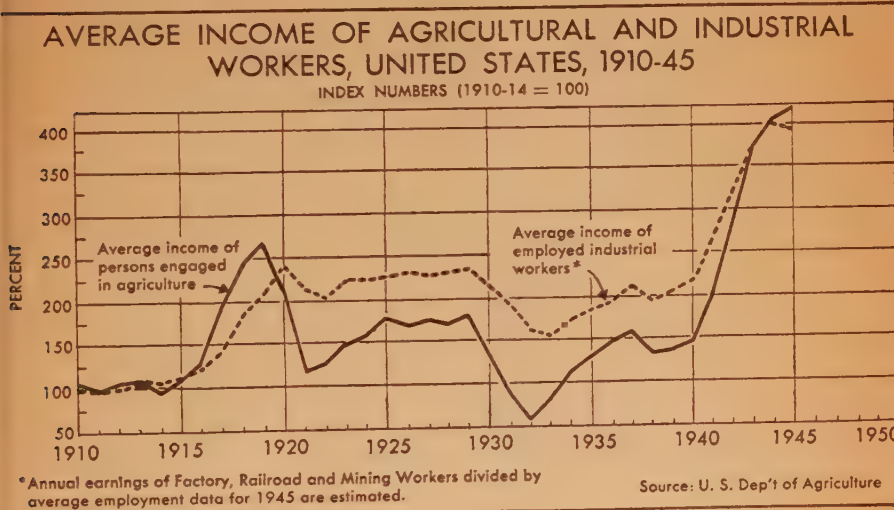
Result	Strikes Percent of total	Workers involved Percent of total
Total	100.0	100.0
Issues settled at strike termination:		
Substantial gains to workers	24.0	10.8
Partial gains or compromises	11.6	12.8
Little or no gains	16.1	19.4
Indeterminate	3.4	6.1
Issues to be negotiated:		
By parties concerned	20.4	21.4
By Government agencies	20.1	25.1
By private arbitrators	4.1	4.4
Not reported	.3	*

*Less than a tenth of 1 percent.

Section X

WHAT WE EARN

"Who gets the money?" has been a favorite topic for political debate—and more violent action—since the beginning of modern civilization. This sections tells the tale for the American economy. It shows, both absolutely and relatively, how much different groups in the economy—workers, farmers, professional persons, businessmen, movie stars, executives—receive, how large a share of the national income goes for wages and salaries, dividends, interest and profits, and how equitably or inequitably these various forms of income are distributed among American families.



Average Weekly Earnings and Average Hours Worked Per Week in Nonmanufacturing Industries

Source: U. S. Department of Labor.

Industry	1935		1939		1941		1944		1945		1946*	
	Earn-	Hours	Earn-	Hours	Earn-	Hours	Earn-	Hours	Earn-	Hours	Earn-	Hours
	ings	Worked	ings	Worked	ings	Worked	ings	Worked	ings	Worked	ings	Worked
Anthracite mining.....	\$25.98	31.7	\$25.67	27.7	\$27.41	28.1	\$47.93	40.7	\$48.98	39.2	\$55.19	39.7
Bituminous coal mining...	19.58	26.4	23.88	27.1	30.86	31.1	51.27	43.4	52.25	42.3	50.10	38.8
Metalliferous mining.....	23.33	38.7	28.05	40.9	33.28	41.7	44.45	44.2	45.86	44.0	43.19	39.4
Quarrying and nonmetallic mining.....	16.68	34.9	21.61	39.2	26.25	41.8	39.55	46.3	41.26	46.6	42.30	44.8
Telephone.....	28.32	.....	31.07	39.1	31.95	40.1	38.39	42.3	.....	.....	43.86	39.9
Telegraph.....	28.31	45.3	33.13	45.9	35.42	46.5	48.04	43.1	50.05	43.5	50.94	41.8
Electric light and power...	31.07	39.3	34.38	39.6	36.54	39.8	47.64	50.4	50.50	51.4	50.88	49.2
Street railways and busses.	26.93	41.3	29.85	41.7	32.32	41.0	42.29	42.9	44.07	42.7	46.67	41.8
Wholesale trade.....	19.96	41.8	21.17	43.0	21.94	42.5	26.58	40.3	28.31	40.3	31.28	40.5
Retail trade.....	13.57	47.8	15.25	47.1	16.09	45.6	22.65	44.5	24.53	44.2	26.53	43.9
Hotels (year-round).....	15.55	40.7	17.69	42.7	19.00	43.3	27.00	43.8	28.61	43.4	29.89	43.4
Laundries.....	18.27	41.7	19.96	41.8	21.70	43.6	30.90	44.0	32.94	43.3	34.99	43.3
Dyeing and cleaning.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Private building construction.....	24.51	30.1	30.34	32.6	35.00	34.7	52.04	39.5	53.86	39.1	53.33†	37.6†

*Average of first 6 months.

†Average of first 5 months.

Average Weekly Earnings and Average Hours Worked Per Week in Manufacturing Industries

Source: U. S. Department of Labor.

Industry	1935		1939		1941		1944		1945		1946 [§]	
	Earn-	Hours	Earn-	Hours	Earn-	Hours	Earn-	Hours	Earn-	Hours	Earn-	Hours
	ings	Worked	ings	Worked	ings	Worked	ings	Worked	ings	Worked	ings	Worked
All manufacturing*	\$20.85	36.5	\$23.86	37.7	\$29.58	40.6	\$46.08	45.2	\$44.41	43.4	\$42.10	40.4
Durable goods.....	22.72	37.1	26.50	38.0	34.04	42.1	52.07	46.6	49.07	44.1	44.70	40.2
Iron and steel products	22.10	36.0	27.52	37.2	34.66	41.6	50.63	46.8	49.10	44.6	45.65	39.6
Electrical machinery..			27.09	38.6	35.04	43.7	47.76	46.4	46.45	44.1	43.48	40.1
Machinery, except electrical.....	23.20	37.7										
Transportation equipment, exc. autos.....			29.27	39.3	38.34	45.9	54.63	48.7	52.24	45.8	48.69	41.3
Automobiles.....	26.83†	36.7†	30.51	38.9	40.30	44.4	60.28	47.3	56.10	43.7	51.05	39.6
Nonferrous metals and products.....	27.41	37.1	32.91	35.4	41.25	39.6	57.82	45.5	51.99	41.3	46.86	36.5
Lumber and timber products.....	21.63	38.8	26.74	38.9	33.07	42.4	49.16	46.8	48.28	45.2	47.02	42.1
Furniture and finished lumber.....	15.92‡	38.1‡	19.06	39.0	22.22	39.7	34.19	43.2	33.80	42.0	34.91	40.6
Stone, clay and glass.....	17.58	38.9	19.95	38.5	23.78	40.8	36.05	44.2	36.68	43.3	37.62	42.0
Nondurable goods.....	19.34	35.3	23.94	37.6	27.44	39.0	39.07	43.6	40.00	43.1	40.57	40.9
Textile—mill products.....	19.20	36.1	21.78	37.4	24.92	38.9	37.12	43.1	38.30	42.4	39.65	40.6
Apparel and other finished textiles.....	16.13	33.8	16.84	36.6	20.30	38.6	29.63	41.9	31.09	41.1	34.28	40.2
Leather.....			18.17	34.5	20.64	35.7	30.33	38.0	31.67	36.9	34.89	37.0
Food.....	18.71	36.1	19.13	36.2	22.95	38.3	33.07	41.3	35.05	41.1	37.07	40.1
Tobacco.....	20.66	39.3	24.43	40.3	26.30	40.4	38.48	45.4	39.51	44.9	40.89	43.3
Paper.....	14.12	35.0	16.84	35.4	19.27	37.0	29.94	42.4	31.79	41.7	32.84	39.4
Printing and publishing.....	24.56	37.8	23.72	40.1	27.75	42.0	38.95	46.0	40.50	45.9	41.84	43.6
Chemicals.....			32.42	37.4	34.60	38.4	44.13	41.0	47.22	41.4	50.66	40.8
Petroleum and coal.....	22.90	37.8	25.59	39.5	30.15	40.8	43.58	45.7	44.00	44.5	43.11	41.3
Rubber.....			32.62	36.5	35.96	37.8	55.19	46.7	55.87	46.2	53.01	40.5
	23.52	34.7	27.84	36.9	32.49	39.5	49.80	45.5	49.54	44.0	48.19	40.4

*Average weekly earnings in 1919—\$23.29, 1929—\$26.40, 1932—\$17.86. Average hours worked per week in 1914—51.0, 1919—47.8, 1929—45.7, 1932—38.2.

†Includes automobiles.

‡Includes furniture.

§Average of first six months.

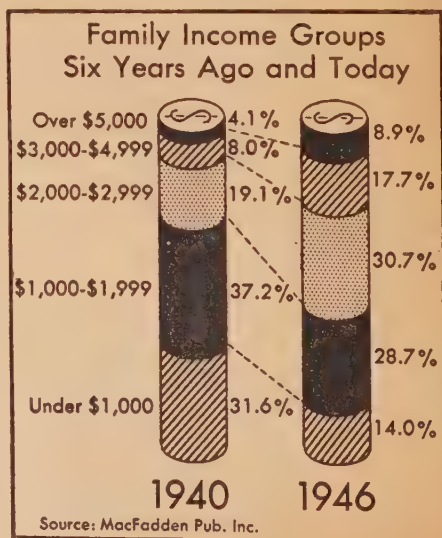
Percentage Distribution of Families and Single Individuals by Income Classes

Source: National Resources Committee; Office of Price Administration; U. S. Bureau of Agricultural Economics; Willford I. King, *The Wealth and Income of the People of the United States*.

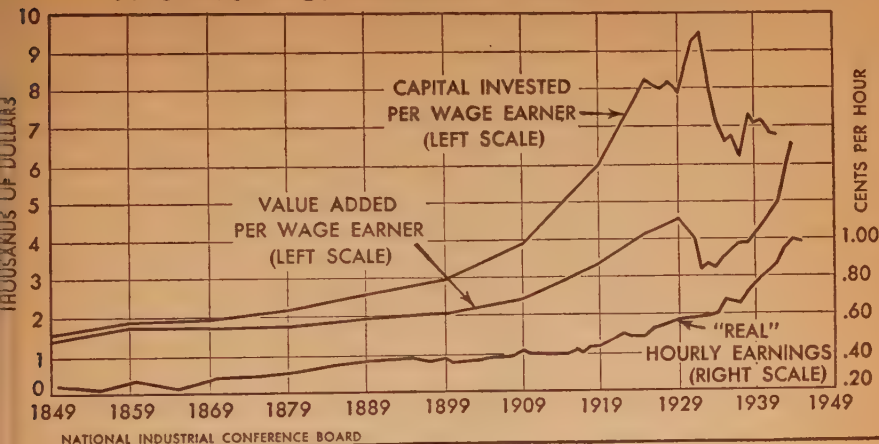
Income range	1910	1935-36	1942	1945*
Under \$500.....	69.4	17.0	8.5	20.1
500—1,000.....	20.9	29.5	16.1	
1,000—1,500.....	4.5	22.2	16.0	27.0
1,500—2,000.....		13.1	14.5	
2,000—2,500.....	2.6	7.5	11.3	22.4
2,500—3,000.....		3.7	8.0	
3,000—4,000.....		3.4	11.2	15.2
4,000—5,000.....	1.5	1.2	6.4	6.8
5,000—7,500.....		1.5	4.6	4.8
7,500—10,000.....	1.2		1.5	
Over 10,000.....		.9	1.9	2.6
Total (thousands of spending units)	27,945	39,458	41,210	46,000†

*Basic unit is spending unit comprising all persons belonging to same family and living in same dwelling unit who pool major items of income and expense.

†1% of spending units not accounted for.



A CENTURY OF MANUFACTURING GROWTH



National Income by Distributive Shares (in millions of dollars)

Source: U. S. Department of Commerce.

Type of share	1929	1932	1937	1938	1939	1940	1941	1942	1943	1944	1945
Total compensation of employees.....	53,066	31,661	48,262	45,105	48,075	52,288	64,489	84,087	106,348	116,027	114,500
Total salaries and wages.....	52,556	31,027	44,989	41,181	44,236	48,622	60,810	80,793	103,139	112,806	111,400
Salaries and wages in private industry.....	47,546	26,056	39,267	35,183	37,990	41,851	52,587	66,921	79,973	84,595	.....
Salaries and wages in governmental agencies.....	5,010	4,971	5,722	5,998	6,246	6,771	8,223	13,872	23,166	28,211	.....
Total supplements to salaries and wages.....	510	634	3,273	3,924	3,839	3,666	3,679	3,294	3,209	3,221	3,100
Work-relief wages.....	.....	132	1,639	2,094	1,870	1,577	1,213	586	58	.....	.....
Social Security contributions of employers.....	.....	.....	1,020	1,185	1,286	1,358	1,686	1,953	2,296	2,293	.....
Other labor income.....	510	502	614	645	683	731	780	755	855	928	.....
Net income of incorporated business.....	7,194	-3,646	3,943	1,658	4,228	5,844	8,519	8,740	9,842	9,908	9,000
Dividends.....	5,944	2,727	4,745	3,172	3,806	4,046	4,511	4,299	4,348	4,494	4,500
Corporate savings.....	1,250	-6,373	-802	-1,514	422	1,798	4,008	4,441	5,494	5,414	4,500
Net income of proprietors.....	13,630	4,849	11,919	10,122	11,151	11,989	15,838	20,574	23,467	24,083	25,600
Agriculture.....	5,174	1,488	5,086	4,013	4,291	4,362	6,278	9,703	11,875	11,763	12,500
Other.....	8,456	3,361	6,833	6,109	6,860	7,627	9,560	10,871	11,592	12,320	13,100
Interest.....	5,867	5,628	5,146	5,068	5,085	5,129	5,250	5,472	6,041	6,701	11,800
Net rents and royalties.....	3,569	1,471	2,243	2,247	2,290	2,324	2,761	3,359	3,694	3,934	.....
Total national income.....	83,326	39,963	71,513	64,200	70,829	77,574	96,857	122,232	149,392	160,653	161,000

Real Consumer Income* (in billions of June 1946 dollars)

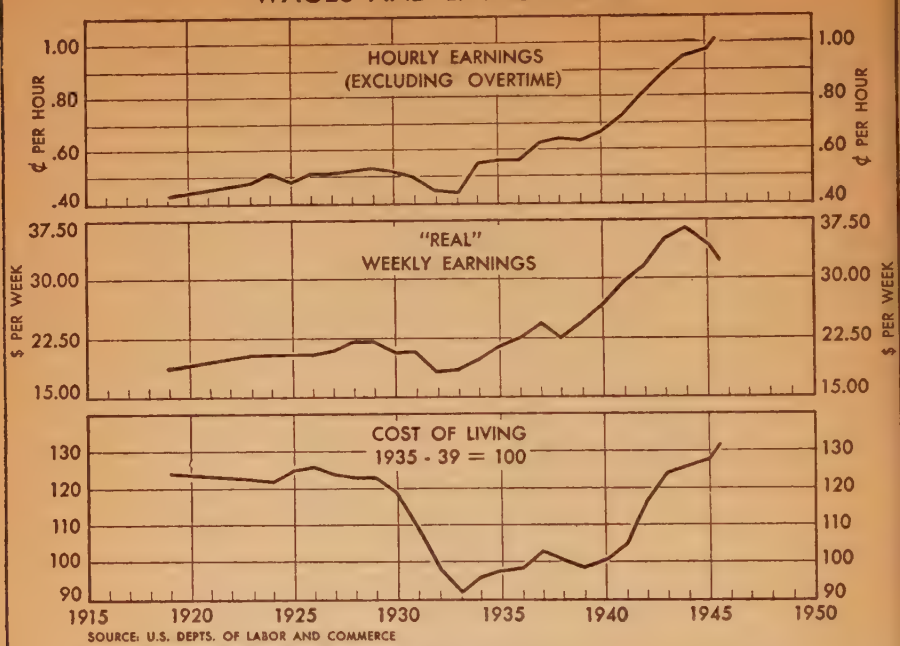
Source: U. S. Department of Labor and U. S. Department of Commerce.

1929.....	90.7	1941.....	122.7
1932.....	54.6	1942.....	139.8
1937.....	92.8	1943.....	161.0
1938.....	84.9	1944.....	170.6
1939.....	95.0	1945.....	167.1
1940.....	103.2	1946†.....	158.4

*National income, adjusted by changes in U. S. B. L. S. consumer price or cost of living index.

†First 6 months.

WAGES AND LIVING COSTS



Wage Rates in the United States and Foreign Countries (in dollars)

Source: International Labour Office; National Industrial Conference Board.

Country	1937 *			1939			1940			1941		
	Hourly	Daily	Weekly	Hourly	Daily	Weekly	Hourly	Daily	Weekly	Hourly	Daily	Weekly
United States.....	.695	.....	26.80	.720	.....	27.04	.739	.....	28.54	.814	.....	33.62
Australia.....	.394	.....	17.69	.385	.....	.....	.346	.....	.....	.385	.....	.....
France.....	.407	.....	.....	.....	.....	.....	.227	.....	.....	.....	.....	.....
Germany.....	.272	.....	10.66	.273	.....	.....	.273	.....	.....	.275	.....	.....
Italy.....	.111	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Japan.....	.....	.563	.....	.....	.520	.....	.....	.....	.....	.....	.....	.....
New Zealand.....	.....	.....	17.61	.....	.....	17.46	.....	.....	15.59	.....	.....	17.71
Norway.....	.....	3.127	.....	.....	3.260	.....	.....	3.440	.....	.....	.....	.....
Sweden.....	.293	.....	13.95	.305	.....	14.35	.326	.....	15.35	.346	.....	16.34
Union of Soviet Socialist Republics.....	.....	2.030	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

Average Net Income in Selected Professions (in dollars)

Source: U.S. Department of Commerce.

	1933	1935	1936	1937	1938	1939	1940	1941
Dentists.....	2,188	2,485	2,726	2,883	.....	.....	.....	3,782
Lawyers.....	3,868	4,272	4,394	4,483	.....	4,391	.....	4,794
Physicians.....	2,948	3,695	4,204	4,285	4,093	4,229	4,441	5,047
Nurses.....	.....	1,076	.....	.....	1,101	1,125	1,157	1,192
Veterinaries.....	.....	.....	.....	.....	2,170	2,240	2,308	2,657

Farm Income—Estimated Cash Income from Crops (in millions of dollars)

Source: U. S. Department of Agriculture.

Year	Cotton and cotton-seed	Tobacco	Bread grains	Oil-bearing crops	Feed grains and hay	Vegetables	Fruits and nuts	Sugar crops	Other crops
1919	2,282	500	1,746	96	1,173	619	642	141	475
1929	1,512	279	790	85	706	710	620	81	342
1932	461	115	220	31	235	358	327	68	182
1939	627	271	475	112	477	589	443	80	292
1940	647	241	478	127	572	591	442	79	293
1941	1,045	323	756	232	594	730	613	92	333
1942	1,244	474	944	468	815	1,086	826	128	402
1943	1,314	541	960	653	1,122	1,579	1,223	108	481
1944	1,497	689	1,328	588	1,194	1,567	1,504	133	539
1945	1,034	954	1,313	579	1,370	1,642	1,449	168	547
1945 (Jan.-June)	299	274	382	62	665	690	553	*	267
1946 (Jan.-June)	251	209	520	124	682	738	549	*	280

*Included in "other crops."

Farm Income—Estimated Cash Income and Government Payments (in millions)

Year	Cash income from marketings		Government payments
	Crops	Livestock and livestock products	
1919	7,674	6,928	...
1929	5,125	6,171	...
1930	3,840	5,181	...
1931	2,536	3,835	...
1932	1,997	2,746	...
1933	2,473	2,841	131
1934	3,004	3,330	446
1935	2,978	4,108	573
1936	3,651	4,716	287
1937	3,948	4,902	367
1938	3,190	4,496	482
1939	3,366	4,511	807
1940	3,470	4,870	766
1941	4,718	6,439	586
1942	6,387	8,987	697
1943	7,982	11,360	672
1944	9,039	11,199	810
1945	9,056	11,725	769
1945*	3,192	5,708	439
1946*	3,353	5,397	552

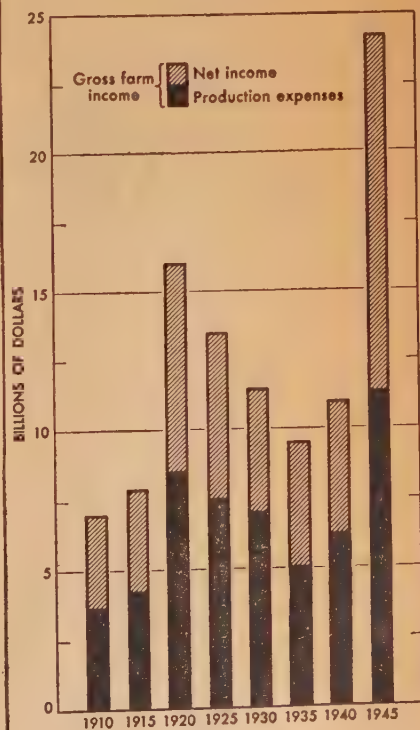
*Total for first 6 months, not adjusted for seasonal variation.

Monthly Farm Wage Rates

Year	Farm wage rates (average)		Year	Farm wage rates (average)	
	With board	Without board		With board	Without board
1910	\$21.22	\$28.08	1940	\$28.05	\$36.68
1920	51.73	65.40	1941	34.85	43.64
1922	32.75	43.33	1942	46.64	56.07
1929	40.61	51.22	1943	61.91	72.51
1933	18.07	25.67	1944	74.00	85.70
1937	28.00	36.32	1945	82.30	95.40
1939	27.39	35.82	1946*	86.88	101.01

*Average of the first of January, April, and July rate.

GROSS FARM INCOME: NET INCOME AND PRODUCTION EXPENSES OF FARM OPERATORS 1910-1945



SOURCE: U.S. DEPT. OF AGRICULTURE

Section XI

HOW WE SPEND

What does the American do with the income he receives and the savings he accumulates? In this section, you will find the answers in detail—what we spend for, how much we spend and pay in taxes, and how the spending by all consumers for different commodities and services fluctuates with changes in the nation's income.

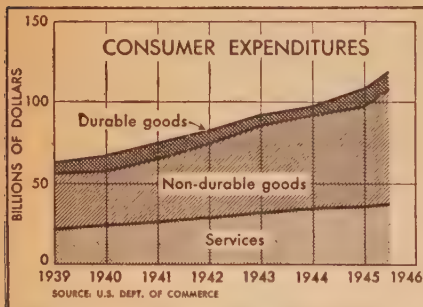
Consumer Spending

(in millions of dollars)

Source: U. S. Bureau of Census.

Group	1929	1932	1937	1938	1939	1940	1941	1942
Food and tobacco.....	21,723	13,545	21,420	20,110	20,607	21,876	25,296	31,459
Clothing, accessories and jewelry..	11,138	6,226	7,879	7,835	8,311	8,801	10,341	12,547
Personal care.....	1,112	841	967	949	994	1,107	1,274	1,529
Housing.....	11,273	8,844	8,280	8,628	8,833	9,136	9,664	10,127
Household operation.....	11,083	7,010	9,669	9,043	9,808	10,706	12,336	13,311
Medical care and death expenses....	3,575	2,616	3,180	3,175	3,365	3,567	4,008	4,483
Personal business.....	3,503	2,061	2,758	2,623	2,677	2,824	3,041	2,960
Transportation.....	8,284	4,348	7,006	6,081	6,844	7,561	8,901	6,050
Recreation.....	4,333	2,537	3,451	3,284	3,492	3,795	4,326	4,703
Educational fees.....	471	378	420	439	449	460	509	578
Gifts and bequests.....	1,458	1,020	1,110	1,011	980	1,092	1,070	1,279
Foreign travel and remittances.....	995	544	613	532	488	306	277	190
Total consumer outlay.....	78,949	49,971	66,754	63,710	66,848	71,232	81,042	89,218

Note: Alcoholic beverages (in millions of dollars): 1933—\$626; 1937—\$3,442; 1938—\$3,237; 1939—\$3,425; 1940—\$3,595; 1941—\$4,192; 1942—\$5,187.



Spendable Income, Consumer Expenditures and Savings

(in billions of dollars)

Source: U. S. Department of Commerce.

	Spendable income	Consumer expenditures	Consumer savings
1929.....	79.6	70.8	8.8
1932.....	45.6	43.0	2.6
1933.....	44.5	42.4	2.1
1937.....	69.2	62.5	6.7
1939.....	67.7	61.7	6.0
1940.....	72.9	65.7	7.3
1941.....	88.7	74.6	14.2
1942.....	110.6	82.0	28.6
1943.....	124.6	91.3	33.3
1944.....	137.4	98.5	38.9
1945.....	139.7	104.9	34.9
1946*.....	140.0	121.1	18.9

*Annual rate for first six months.

Total consumer spendings of \$97.8 billion in 1943 were distributed as follows: food and tobacco 37.4%, clothing 15.1%, personal care 1.8%, housing 10.6%, household operation 13.6%, medical care and death expenses 4.8%, personal business 3.1%, transportation 5.8%, recreation 5.1% and other 2.6%.

Who Pays the Taxes*

Source: Temporary National Economic Committee.

NOTE: Data below are only estimates based on scanty factual data, but it does indicate with a high degree of probability the contemporary tax pattern.

Income classes	Taxes as a percentage of income*	Percent of taxes paid by each income class
Under \$500.....	21.9	3.7
\$500 to \$1,000.....	18.0	12.8
\$1,000 to \$1,500.....	17.3	15.0
\$1,500 to \$2,000.....	17.8	12.9
\$2,000 to \$3,000.....	17.5	15.1
\$3,000 to \$5,000.....	17.6	9.7
\$5,000 to \$10,000.....	17.9	6.2
\$10,000 to \$15,000.....	25.5	4.0
\$15,000 to \$20,000.....	31.7	3.6
\$20,000 and over.....	37.8	17.0
Total, all classes.....	20.2	100.0

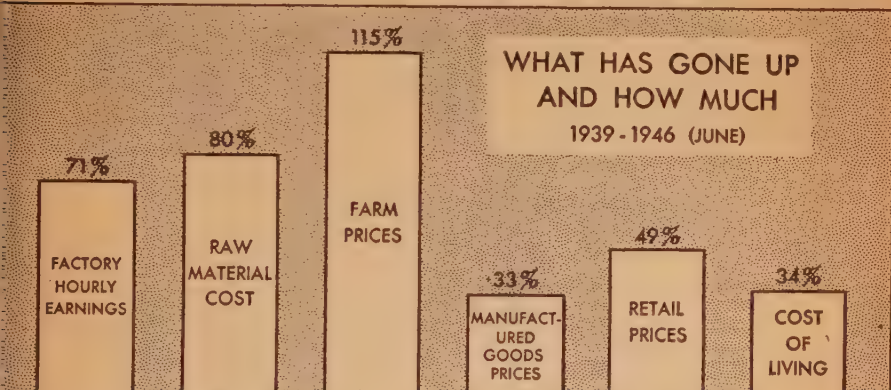
*Includes imputed taxes. Corporation income and profits taxes and estate, inheritance and gift taxes are added to the income group imputed to pay them. Income estimate includes imputed income from owned homes and home-grown food.

Section XII

WHAT LIVING COSTS US

Complaints about the high cost of living have followed every war. During World War II, the United States had virtually the best record among the major powers for holding down prices. However, since V-J Day the cost of living in the United States has risen faster than in either Great Britain or Canada. But since United States wage rates and other income payments have also gone up faster than in these countries, real living standards in the United States have not suffered correspondingly.

This section gives you the salient details on changes in major prices and the cost of living in the American economy for the last few generations.



Source: U. S. Dept. of Commerce and Labor

Average Retail Prices of Principal Food Items

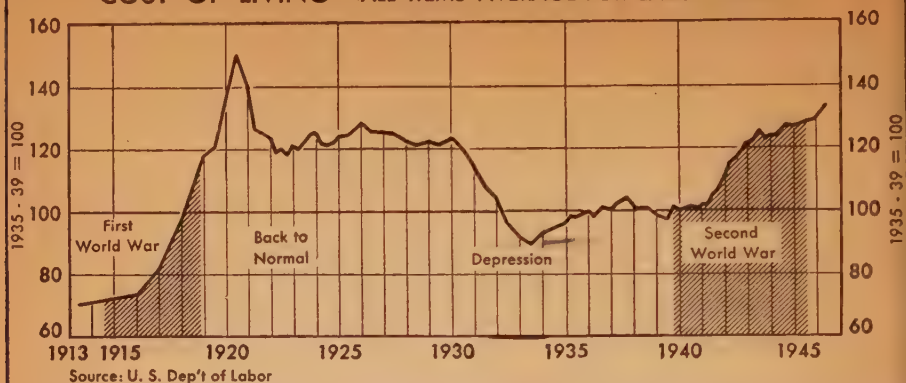
Source: U. S. Department of Labor.

Prices in cents per pound except for milk (cents per quart), eggs and oranges (cents per dozen), and tomatoes (cents per No. 2 can).

Item	1913	1920	1922	1929	1932	1939	1941	1942	1943	1944	1945	1946*
Wheat flour.....	3.3	8.1	5.1	5.1	3.2	3.8	4.5	5.3	6.1	6.5	6.4	6.4
Corn meal.....	3.0	6.5	3.9	5.3	3.6	4.0	4.3	4.8	5.6	6.2	6.4	6.6
Bread, white.....	5.6	11.5	8.7	8.8	7.0	7.9	8.1	8.7	8.9	8.8	8.8	9.3
Round steak.....	22.3	39.5	32.3	46.0	29.7	36.0	39.1	43.5	43.9	41.4	40.6	41.1
Pork roast.....	16.0	26.2	19.2	31.4	18.5	23.4	25.5	29.3	30.2	28.8	28.1	28.7
Pork chops.....	21.0	42.3	33.0	37.5	21.5	30.4	34.3	41.4	40.3	37.3	37.1	37.3
Bacon, sliced.....	27.0	52.3	39.8	43.9	24.2	31.0	34.3	39.4	56.2	41.1	41.4	41.3
Lamb, whole.....	.....	.....	.....	.....	.....	27.5	30.4	37.4	37.7	35.4	34.7	36.0
Lamb, leg.....	18.9	39.3	36.6	40.2	23.8	28.2	29.7	35.3	40.3	40.0	40.0	40.6
Poultry, roasting.....	21.3	44.7	36.0	41.2	25.6	30.6	32.6	39.1	44.9	45.1	46.7	47.4
Poultry, broilers.....	38.3	70.1	47.9	55.5	27.8	32.5	41.1	47.3	52.7	50.0	50.7	55.9
Butter.....	22.1	41.6	32.9	39.5	24.4	25.3	30.0	34.8	37.4	36.1	35.6	38.6
Cheese.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Milk, fresh (delivered).....	8.9	16.7	13.1	14.4	10.7	12.2	13.6	15.0	15.5	15.6	15.6	15.6
Eggs.....	34.5	68.1	44.4	52.7	30.2	32.1	39.7	48.4	57.2	54.5	58.1	51.0
Pineapples.....	.....	12.6	10.3	9.7	6.5	6.3	7.2	10.2	11.7	11.3	10.4	10.9
Bananas.....	.....	63.2	57.4	44.7	30.2	28.9	31.0	35.7	44.3	46.0	48.5	46.7
Oranges.....	.....	6.4	4.6	5.3	4.1	3.6	4.2	4.3	7.1	5.3	6.1	6.7
Cabbage.....	.....	7.1	7.9	6.7	5.0	3.8	5.0	5.9	7.5	6.9	6.9	8.6
Onions.....	.....	1.7	6.3	2.8	3.2	1.7	2.5	2.4	3.4	4.6	4.7	4.9
Potatoes.....	.....	14.8	13.4	12.8	9.3	8.6	9.1	11.7	15.0	12.0	12.2	12.7
Tomatoes.....	.....	28.1	20.1	15.3	9.2	8.9	9.8	13.3	16.6	17.0	17.5	17.7
Beans, dried.....	.....	29.8	47.0	36.1	47.9	29.4	22.4	23.6	28.3	30.0	30.1	30.5
Coffee.....	.....	15.8	29.5	17.0	18.1	8.7	11.0	12.7	17.2	19.0	18.7	18.8
Rice.....	.....	5.5	19.4	7.3	6.4	5.0	5.4	5.7	6.8	6.8	6.8	6.7
Sugar.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

*Average for first 6 months under O. P. A. regulations.

COST OF LIVING (ALL ITEMS—AVERAGE FOR LARGE CITIES)

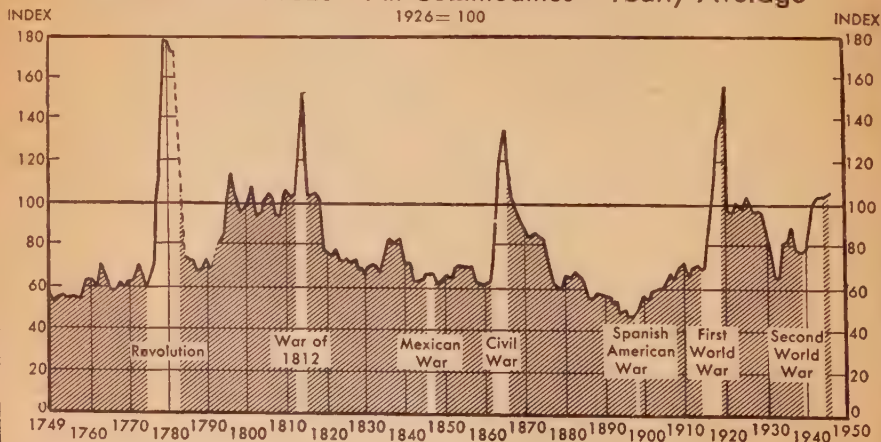


Consumer Price Index (1935-1939=100)*

Year	All items	Food	Clothing	Rent	Fuel, electricity, and ice	House furnishings	Miscellaneous
1929	122.5	132.5	115.3	141.4	112.5	111.7	104.6
1932	97.6	86.5	90.8	116.9	103.4	85.4	101.7
1937	102.7	105.3	102.8	100.9	100.2	104.3	101.0
1938	100.8	97.8	102.2	104.1	99.9	103.3	101.5
1939	99.4	95.2	100.5	104.3	99.0	101.3	100.7
1940	100.2	96.6	101.7	104.6	99.7	100.5	101.1
1941	105.2	105.5	106.3	106.2	102.2	107.3	104.0
1942	116.5	123.9	124.2	108.5	105.4	122.2	110.9
1943	123.6	138.0	129.7	108.0	107.7	125.6	115.8
1944	125.5	136.1	138.8	108.2	109.8	136.4	121.3
1945	128.4	139.1	145.9	108.3	110.3	145.8	124.1
1946†	131.0	141.8	153.5	108.5	110.6	151.8	126.5

*Formerly "cost of living" index. †Average for first 6 months.

WHOLESALE PRICES All Commodities—Yearly Average



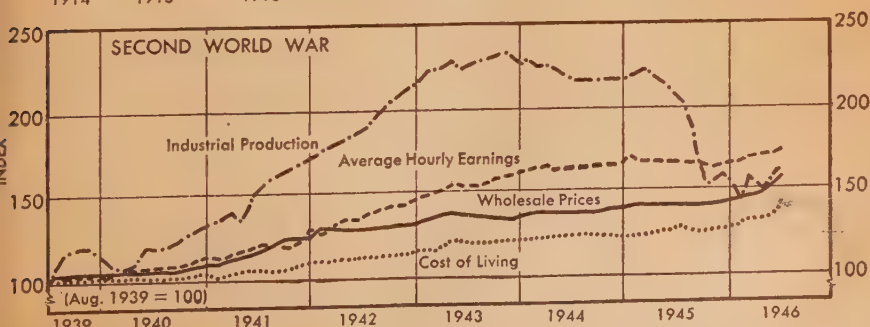
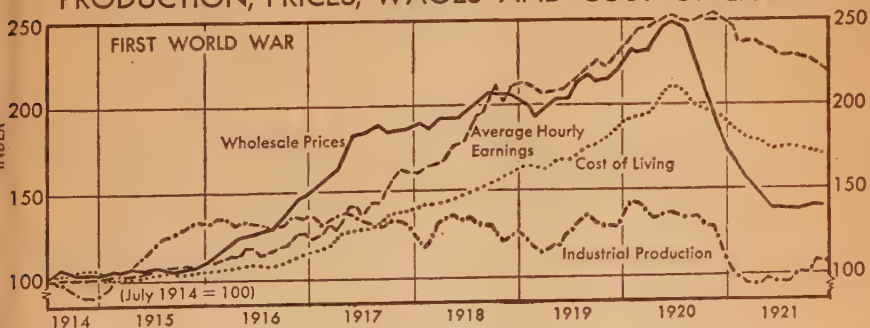
Wholesale Price Indexes by Major Commodity Groups (1926=100)

Source: U. S. Bureau of Labor Statistics.

Year	All commodities	Farm products	Foods	Hides and leather products	Textile products	Fuel and lighting	Metals and metal products	Building materials	Chemicals and allied products	House furnishing goods	Miscellaneous
1900	56.2	50.4	55.5	47.5	57.8	38.1	105.3	46.5	73.2	49.9	97.9
1901	56.1	50.5	50.8	49.4	53.3	46.3	98.0	46.2	82.1	48.9	102.0
1902	70.4	74.3	64.9	60.2	58.4	47.6	85.2	55.3	82.0	54.0	152.7
1903	69.5	71.5	65.4	75.5	54.1	51.8	86.3	53.5	112.0	56.0	86.9
1904	85.5	84.4	75.7	93.4	70.4	74.3	116.5	67.6	160.7	61.4	100.6
1905	117.5	129.0	104.5	123.8	98.7	105.4	150.6	88.2	165.0	74.2	122.1
1906	131.3	148.0	119.1	125.7	137.2	109.2	136.5	98.6	182.3	93.3	134.4
1907	138.6	157.6	129.5	174.1	135.3	104.3	130.9	115.6	157.0	105.9	139.1
1908	154.4	150.7	137.4	171.3	164.8	163.7	149.4	150.1	164.7	141.8	167.5
1909	97.6	88.4	90.6	109.2	94.5	96.8	117.5	97.4	115.0	113.0	109.2
1910	96.7	93.8	87.6	104.6	100.2	107.3	102.9	97.3	100.3	103.5	92.8
1911	95.3	104.9	99.9	109.1	90.4	83.0	100.5	95.4	94.0	94.3	82.6
1912	64.8	48.2	61.0	72.9	54.9	70.3	80.2	71.4	73.9	75.1	64.4
1913	86.3	86.4	85.5	104.6	76.3	77.6	95.7	95.2	82.6	89.7	77.8
1914	78.6	68.5	73.6	92.8	66.7	76.5	95.7	90.3	77.0	86.8	73.3
1915	77.1	65.3	70.4	95.6	69.7	73.1	94.4	90.5	76.0	86.3	74.8
1916	78.6	67.7	71.3	100.8	73.8	71.7	95.8	94.8	77.0	88.5	77.3
1917	87.3	82.4	82.7	108.3	84.8	76.2	99.4	103.2	84.4	94.3	82.0
1918	98.8	105.9	99.6	117.7	96.9	78.5	103.8	110.2	95.5	102.4	89.7
1919	103.1	122.6	106.6	117.5	97.4	80.8	103.8	111.4	94.9	102.7	92.2
1920	104.0	123.3	104.9	116.7	98.4	83.0	103.8	115.5	95.2	104.3	93.6
1921	105.8	128.2	106.2	118.1	100.1	84.0	104.7	117.8	95.2	104.5	94.7
1922	109.6	134.5	110.0	120.2	105.7	85.8	108.5	125.0	96.2	107.6	96.3

*Average for first 6 months.

PRODUCTION, PRICES, WAGES AND COST OF LIVING



Average Wholesale Prices of Important Commodities

Source: U. S. Department of Labor.

Commodity	Average price in dollars							
	1929	1932	1939	1941	1943	1944	1945	1946*
Farm Products								
Barley, No. 2, malting, Minneapolis, bu.....	.....	.....	0.552	0.622	1.149	1.346	1.300	1.373
Corn, No. 3, yellow, Chicago, bu.....	.938	.307	.499	.706	1.050	1.149	1.169	1.269
Rye, No. 2, Chicago, bu.....	1.016	.392	.530	.602	.991	1.202	1.471	2.298
Wheat, No. 2, red winter, Chicago, bu.....	1.304	.531	.803	1.046	1.661	1.683	1.753	1.854
Cattle, steers, good to choice, Chicago, 100 lb.....	13.493	7.799	10.433	12.102	15.644	16.238	16.878	16.950
Hogs, good to choice, light, Chicago, lb.....	10.666	4.117	7.098	9.859	14.526	13.997	14.758	14.834
Poultry, live fowls, Chicago, lb.....	.273	.148	.154	.190	.243	.240	.252	.265
Cotton, middling, Galveston, lb.....	.187	.063	.089	.136	.194	.198	.210	.....
Eggs, firsts, Chicago, doz.....	.354	.177	.175	.254	.392	.353	.372	.337
Oranges, average grade, California, box.....	6.540	3.819	3.239	3.379	5.052	5.038	4.879	4.858
Hay, alfalfa, Kansas City, ton.....	24.566	12.144	14.207	13.332	25.288	29.186	27.287	30.188
Milk, fluid, New York, 100 lb.....	3.997	2.379	2.837	3.357	4.160	4.334	4.345	4.453
Flaxseed, Minneapolis, bu.....	2.766	1.181	1.824	1.872	3.038	3.069	3.100	3.163
Wool, domestic, Boston, lb.....	.987	.459	.822	1.091	1.182	1.188	.....	.....
Foods								
Butter, creamery, extra:								
Chicago, lb.....	.437	.200	.253	.337	.430	.410	.414	.467
Cheese, whole milk, Chicago, lb.....	.221	.120	.142	.204	.252	.252	.252	.279
Bread, Chicago, lb.....	.075	.070	.058	.059	.058	.058	.058	.....
Flour, short patents, Kansas City, 100 lb.....	.....	.....	.....	.....	.....	3.286	3.343	.....
Rice, Blue Rose, New Orleans, lb.....	.038	.022	.034	.046	.066	†	.066	.066
Beef, fresh, carcass, steers, Chicago, lb.....	.231	.130	.163	.177	.209	.200	.200	.204
Lamb, fresh, Chicago, lb.....	.256	.134	.167	.184	.248	.238	.238	.242
Hams, Chicago, lb.....	.244	.133	.200	.255	.275	.258	.258	.263
Pork, fresh (composite price), Chicago, lb.....	.183	.078	.133	.179	.212	.199	.207	.....
Poultry, dressed, New York, lb.....	.....	.....	.192	.232	.327	.338	.348	.357
Coffee, Santos 4, New York, bu.....	.221	.107	.075	.114	.134	.134	.134	.134
Sugar, cane, granulated, New York, lb.....	.051	.040	.046	.049	.055	.055	.054	.058
Fuel and Lighting								
Coal, anthracite, chestnut, ton*	11.505	10.879	9.143	10.006	10.889	11.474	11.887	12.509
Coal, bituminous, mine run, ton.....	3.953	3.638	4.311	4.560	5.045	5.239	5.356	5.507
Coke, Connellsville, beehive, furnace, ton.....	2.780	2.123	4.091	5.851	6.481	7.000	7.298	7.500
Coke, Newark, byproduct, foundry, ton.....	9.200	8.654	11.230	12.565	12.825	13.287	13.486	13.725
Petroleum, crude, Kans., Okla., bbl.†.....	1.233	.811	.954	1.060	1.110	1.110	1.110	1.157
Fuel oil, No. 2, refinery, Pa., gal.....	.048	.032	.042	.051	.064	.066	.064	.058
Gasoline, 70-74 oct., refinery, N. Tex., gal.....	.072	.044	.049	.055	.059	.060	.059	.060
Building Materials								
Douglas fir, boards, No. 1 mill, 1,000 ft.....	17.961	9.395	19.336	26.017	32.380	35.883	35.195	36.313
Maple, flooring, 2d grade, Cadillac, 1,000 ft.....	67.775	33.890	56.669	72.537	85.897	95.726	97.854	104.570
Oak, plain, white, No. 1, mill, 1,000 ft.....	43.365	30.135	30.184	35.275	44.345	†	.....	.....
Pine, white, No. 3, Chicago, 1,000 bu.....	37.730	25.480	35.172	45.184	52.355	55.125	55.125	56.268
Shingles, cedar, red, No. 1, mill, sq.....	2.740	1.490	2.814	3.130	4.005	4.350	†	4.724
Brick, common, building plant, 1,000.....	.....	10.694	12.046	12.585	13.428	14.291	15.887	17.429
Linseed oil, raw, New York, lb.....	.123	.063	.092	.106	.151	.152	.155	.151
White lead, in oil, east of Rockies, lb.....	.138	.120	.123	.131	.135	.132	.132	.136
Plaster, f. o. b. cars, destination, ton*	9.976	12.260	11.947	11.886	12.433	12.387	12.689	13.744
Glass, window, single B, New York, 50 sq. ft.....	.....	.....	2.736	2.940	2.940	2.940	2.950	3.353
Lime, building, common, plant, ton*	7.987	6.933	7.097	7.093	7.562	7.562	7.662	7.688
Miscellaneous								
Paper, newsprint, rolls, ton.....	62.000	50.385	50.000	50.000	54.692	58.000	60.250	67.000
Paper, wrapping, standard, kraft, 100 lb.....	.....	.....	3.572	4.429	4.688	4.750	4.750	4.750
Wood pulp, sulfite, domestic, unbleached, ton.....	.....	.....	.....	.....	66.000	73.077	74.000	76.666
Neutral oil, Pennsylvania, gal.....	.269	.164	.189	.285	.246	.280	.280	.280
Tobacco, smoking, 1-oz. bag, destination, gross.....	8.320	5.120	5.120	5.120	5.120	5.120	5.120	5.120
Cigarettes, destination, 1,000.....	5.398	6.042	5.513	5.760	6.006	6.006	6.006	6.006

*Ton of 2,000 pounds. †Data not available. ‡Barrel of 42 gallons. §Average for first 6 months.

Wholesale Prices by Economic Classes

(1926=100)

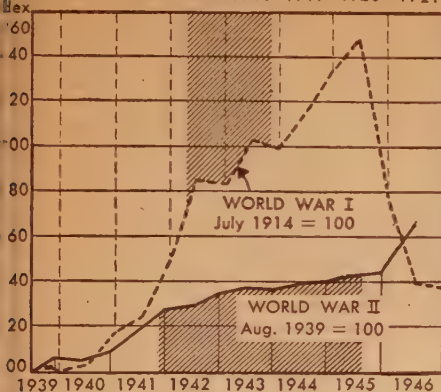
Commodity	1929	1932	1939	1941	1943	1944	1945	1946
Raw Materials.....	97.5	55.1	70.2	83.5	112.1	113.2	116.8	121
Semi-manufactured Articles.....	93.9	59.3	77.0	86.9	92.9	94.1	95.9	100
Manufactured Articles.....	94.5	70.3	80.4	89.1	100.1	100.8	101.8	105

*Average for first six months.

Wholesale Prices in World War I and in World War II

ALL COMMODITIES

1914 1915 1916 1917 1918 1919 1920 1921



Source: U. S. Dep't of Labor

Farm Prices and Parity Prices, June 15, 1946 (in dollars)

Source: U. S. Bureau of Agricultural
Economics.

	Price received	Parity price*	Actual price as % of parity price
Wheat (bushel).....	1.870	1.760	106
Rice (bushel).....	1.860	1.620	115
Corn (bushel).....	1.960	1.280	153
Oats (bushel).....	.847	.794	107
Hay (ton).....	15.000	23.600	64
Cotton (pound).....	.308	.247	125
Soybeans (bushel).....	2.310	1.910	121
Peanuts (pound).....	.090	.096	94
Potatoes (bushel).....	1.480	1.470	101
Apples (bushel).....	3.420	1.910	179
Hogs (hundredweight)....	16.800	14.500	116
Beef cattle (hundredweight)	16.600	10.800	154
Veal calves (hundredweight)	16.600	13.400	124
Lambs (hundredweight)...	15.900	11.700	136
Butterfat (pound).....	.706	.488	145
Chickens (pound).....	.294	.227	130
Eggs (dozen).....	.371	.411	90
Wool (pound).....	.423	.364	116

*Parity price is the August 1909-July 1914 average price increased by the rise in index of prices paid by farmers, including interest and taxes.

Section XIII

WHAT WE OWN

What and how consumers, businessmen and government units save and invest jointly determines the enduring wealth of the country. Money, stocks, bonds, property of all kinds—these make up the stock of American wealth. The facts about them are statistically summarized and analyzed in the present section. The standard of living which our wealth enables us to enjoy is also itemized and compared with that of other nations.

The following figures on the expanding ownership of modern conveniences point up the rise in American living standards.

Automobiles: 8,000 in 1900; 17,500,000 in 1925; 25,800,000 today.
 Telephones: 1,300,000 in 1900; 16,900,000 in 1925; 27,900,000 today.
 Homes with radios: 3,700,000 in 1925; 30,500,000 today.
 Homes with electric washers: 2,800,000 in 1926; 17,217,000 today.
 Homes with electric ranges: 300,000 in 1926; 3,541,000 today.
 Homes with vacuum cleaners: 4,000,000 in 1926; 13,700,000 today.
 Homes with electric refrigerators: 68,000 in 1926; 19,720,000 today.

Selected Types of Individual Savings (in millions of dollars)

Source: Federal Reserve Board, Treasury Department, Securities and Exchange Commission; "The Insurance Year Book," Federal Home Loan Bank, Department of Commerce.

Type	1939	1940	1941	1942	1943	1944	1945
Life insurance.....	22,968	24,584	26,488	29,042	31,256	34,100	37,359
Time deposits:							
Mutual savings banks.....	10,523	10,658	10,532	10,664	11,737	13,300	15,332
Commercial banks.....	15,258	15,777	15,884	16,352	19,213	24,100	29,951
Postal savings system.....	1,278	1,303	1,313	1,415	1,786	2,300	2,933
Savings and loans association assets.....	4,431	4,550	4,822	4,910	5,464	6,264	7,364
Government pension and trust funds.....	7,369	8,569	10,369	12,769	16,569	21,269	26,369
U. S. savings bonds.....	2,229	3,207	6,212	15,050	27,363	40,361	48,183
Demand deposits.....	8,000	8,700	10,900	15,100	17,400	21,100	23,600
Currency.....	4,200	4,900	6,800	10,300	14,400	18,300	21,100
Total.....	76,256	82,248	93,320	115,602	145,188	181,094	212,191

Money—Stock, by Kind, and Money in Circulation (in millions of dollars)

June 30	Money stock by kind					Money in circulation		
	Total	Gold coin and bullion	% of gold to total	Silver dollars	Federal Reserve notes	Total	Silver certificates	Federal Reserve notes
1860.....	442	214	48.41	.....	.....	435	.....	.....
1870.....	900	190	21.06	.....	.....	775	.....	.....
1880.....	1,186	352	29.68	70	.....	973	.....	.....
1890.....	1,685	696	41.28	380	.....	1,429	.....	.....
1900.....	2,366	1,034	43.71	566	.....	2,081	.....	.....
1910.....	3,467	1,636	47.19	568	.....	3,149	.....	.....
1920.....	8,158	2,865	35.12	269	3,406	5,468	.....	.....
1925.....	8,299	4,360	52.54	522	1,942	4,815	.....	.....
1929.....	8,539	4,324	50.64	540	2,195	4,746	387	1,693
1932.....	9,005	3,919	43.52	540	3,028	5,695	353	2,780
1935.....	15,113	9,116	60.32	859	3,492	5,567	702	3,223
1936.....	17,402	10,608	60.96	1,255	4,296	6,241	955	4,002
1937.....	19,377	12,318	63.57	1,382	4,509	6,447	1,078	4,169
1938.....	20,097	12,963	64.50	1,584	4,421	6,461	1,230	4,114
1939.....	23,755	16,110	67.82	1,778	4,764	7,047	1,454	4,484
1940.....	28,458	19,963	70.15	1,900	5,481	7,848	1,582	5,163
1941.....	32,775	22,624	69.03	1,983	7,001	9,612	1,714	6,684
1942.....	35,841	22,737	63.44	2,053	9,791	12,383	1,754	9,310
1943.....	40,868	22,388	54.78	2,059	14,404	17,421	1,649	13,747
1944.....	44,806	21,173	47.26	2,014	19,528	22,504	1,588	18,750
1945.....	48,009	20,213	42.10	2,014	23,651	26,746	1,651	22,867
1946.....	49,648	20,270	40.83	2,403	24,839	28,245	2,026	23,973

Companies with 100,000 or More Stockholders, 1945

Company	Stockholders
American Telephone & Telegraph Co.....	683,897
General Motors Corp.....	425,657
Cities Service Co.....	329,155
General Electric Co.....	243,233
United States Steel Corp.....	225,822
Radio Corp. of America.....	218,873
Pennsylvania Railroad Co.....	215,034
Commonwealth & Southern Corp. (Del.).....	170,391
Standard Oil Co. (New Jersey).....	160,025
Bank of America Natl. Tr. & Savings Assoc.....	157,573
Consolidated Edison Co. of N. Y.....	152,888
Transamerica Corp.....	152,321
Public Service Corp. of N. J.....	132,907
Socony-Vacuum Oil Co.....	130,130
Anaconda Copper Mining Co.....	120,545
Pacific Gas & Electric Co.....	113,933
Packard Motor Car Co.....	112,845
Commonwealth Edison Co. (Chicago).....	111,704
Total.....	3,849,260

Note: There were 10,077,753 stockholders in 203 leading companies at the end of 1945.

Seventy-two out of the 100 largest manufacturing companies in 1945 had a total of 2,925,449 employees and 4,082,805 stockholders. Typical are:

	Employees	Stockholders
Socony-Vacuum Oil Co.	39,445	130,130
General Motors Corp.	345,940	425,657
Anaconda Copper Mining Co.	46,404	120,545
Bethlehem Steel Corp.	202,095	78,854
Packard Motor Co.	10,844	112,845

Sales and Redemptions of United States Savings Bonds

(in millions of dollars)

Source: U. S. Treasury Department.

Year	All Series Sales*	Re-demptions	Amount outstanding†	Series E Sales*	Re-demptions	Amount outstanding†
1941	3,036	168	6,140	1,145	11	1,134
1942	9,157	349	15,050	5,990	209	6,923
1943	13,729	1,585	27,363	10,344	1,380	15,957
1944	16,044	3,341	40,361	12,380	3,005	25,515
1945	12,937	5,558	48,183	9,822	4,963	30,727
1946‡	4,042	3,521	49,035	2,487	3,038	30,358

*Issue price. †End of year. ‡Jan. to June, inclusive.

United States Paper Currency

There are four kinds of United States paper currency in circulation: silver certificates, national bank notes, United States notes and Federal Reserve notes. Paper currency is issued in the following denominations, the face of the bills carrying portraits as indicated.

\$1	Washington	\$100	Franklin
\$2	Jefferson	\$500	McKinley
\$5	Lincoln	\$1000	Cleveland
\$10	Hamilton	\$5000	Madison
\$20	Jackson	\$10,000	Chase
\$50	Grant	\$100,000*	Wilson

*Probably none in circulation. There is one on display at the Bureau of Printing and Engraving, Washington, D. C.

INDICATORS OF RELATIVE STANDING OF KINGDOMS
Expressed Mainly as Annual Averages about 1924-1933
Source: Quarterly Journal of Economics, February, 1937.

	United States	British Isles	France	Germany	Italy	Spain	Portugal	Belgium	Holland	Switzerland	Denmark	Norway	Sweden	Finland	Mean
Professional Service															
Deaths per 1,000 inhabitants.....	11.5	12.3	16.6	11.7	15.5	18.3	17.9	13.2	9.9	12.1	11.2	10.9	12.1	13.9	13.3
Births per 1,000 inhabitants.....	19.5	17.2	17.9	17.7	26.2	29.2	30.7	18.6	22.9	17.2	18.9	17.8	15.9	21.2	20.8
Percentage of occupied population engaged in professional service.....	5.2	4.4	4.0	4.1	3.0	2.0	1.6	3.6	6.5	5.3	5.5	3.5	3.8	1.7	3.9
Percentage of population aged 5-20 attending elementary and secondary schools.....	61.2	53.9	46.4	64.4	35.5	24.8	20.0	56.5	53.6	46.0	50.8	49.0	44.1	37.0	45.0
Transport and Communication															
Telephone instruments per 1,000 inhabitants.....	148.2	41.3	27.9	50.0	9.2	9.5	5.6	38.5	41.7	72.1	100.4	67.7	85.5	34.8	52.3
Telephone and telegraph wire per 100,000 inhabitants (1,000 miles).....	62.8	19.8	11.3	22.9	2.7	4.2	1.9	17.5	6.0	22.6	27.8	22.0	20.2	8.4	17.9
Telegraph messages sent per capita.....	1.61	1.23	.99	.44	.74	.62	.40	1.06	.65	.68	.63	1.23	.65	.25	.80
Railway, locomotives per 100,000 inhabitants.....	52	48	50	37	14	16	15	49	17	31	33	21	35	21	31
Motor vehicles per 1,000 inhabitants.....	190	37	45	14	8	8	5	22	17	26	36	18	27	9	33
Luxury Food Consumption															
Production plus net imports or minus net exports of raw sugar per capita (kilograms).....	49.4	45.6	25.9	24.6	9.1	11.2	11.1	27.3	41.1	37.6	54.3	27.0	41.7	23.3	30.7
Production plus net imports or minus net exports of raw tobacco per capita (kilograms).....	2.70	1.70	1.82	1.80	1.16	1.37	.44	3.46	3.33	1.83	1.71	.87	.99	.86	1.72
Net imports of tea, coffee, and cacao per capita (kilograms).....	7.66	11.48	5.22	3.29	1.27	1.40	.73	6.43	12.64	5.21	8.31	6.70	7.73	4.66	5.91
Production plus net imports or minus net exports of all citrus fruits and bananas per capita (kilograms).....	26.8	16.2	7.4	5.9	10.7	16.9	16.9	8.0	10.5	8.1	4.7	8.1	5.1	1.3	10.5

National Income of the United States and Foreign Countries

Source: National Industrial Conference Board.

Country	Currency	1935	1936	1937	1938	1939	1940
Per Capita National Income in Dollars							
United States.....	Dollars.....	443	511	536	484	522	545
Australia.....	Dollars.....	.....	421	446	444	416	.....
Canada.....	Dollars.....	315	341	374	366	371	369
France.....	Dollars.....	275	283	234	183	.....	.....
Germany.....	Dollars.....	349	388	421	452	.....	.....
Japan.....	Dollars.....	61	68	76	.....	.....	.....
New Zealand.....	Dollars.....	293	365	408	.....	.....	.....
United Kingdom.....	Dollars.....	418	457	500	454	.....	445

Section XIV

WHAT WE OWE

Much modern wealth is also debt; one man's asset is frequently another man's liability. For example, while 85 million Americans consider their \$50 billion in war and savings bonds as assets they own, the bonds are also liabilities which, as part of the public debt, must be financed or retired.

This section gives you the basic facts about the development and relationships of three types of debt—individual, business and public—in the United States.

Net Debt in the United States*

(in billions of dollars)

Source: U. S. Department of Commerce.

Class	1916	1920	1925	1930	1935	1940	1941	1942	1944	1945
Net Public Debt:										
Federal.....	1.2	23.5	19.5	14.8	26.0	36.9	47.8	93.6	205.0	247.0
State and local.....	4.4	5.9	10.0	14.7	16.1	16.5	16.3	15.8	14.1	13.7
Total.....	5.6	29.4	29.5	29.5	42.1	53.4	64.1	109.4	219.1	260.7
Net Private Debt:										
Long-term debt.....	43.5	54.9	71.3	93.6	77.2	77.5	78.7	76.8	72.7	71.7
Corporate.....	29.1	32.6	39.7	51.1	43.6	43.7	43.6	42.7	40.3	39.3
Farm mortgage.....	5.8	10.2	9.7	9.4	7.4	6.5	6.5	6.1	5.3	5.1
Urban and real estate mtge....	8.6	12.1	21.9	33.1	26.2	27.3	28.6	28.0	27.1	27.3
Short term debt.....	32.3	50.2	59.9	64.9	44.7	49.1	59.6	64.0	73.3	68.0
Total.....	75.8	105.1	131.2	158.5	121.9	126.6	138.3	140.8	146.0	139.7
Net public and private debt.....	81.4	134.5	160.7	188.0	164.0	180.0	202.4	250.2	365.1	400.4

*End of year.

Consumer Credit

(in millions of dollars)

Source: Federal Reserve Board.

End of year	Total*	Instal- ment sale debt	Charge account sale debt	Cash loan debt†
1929.....	7,637	2,515	1,749	2,777
1932.....	4,082	999	1,114	1,478
1937.....	7,467	2,752	1,459	2,699
1939.....	7,981	2,792	1,544	3,112
1940.....	9,153	3,450	1,650	3,493
1941.....	9,899	3,744	1,764	3,781
1942.....	6,485	1,491	1,513	2,833
1943.....	5,338	814	1,498	2,339
1944.....	5,777	835	1,758	2,455
1945.....	6,734	903	1,981	3,078
1946†.....	7,754	1,035	2,332	3,560

*Includes service credit.

†Instalment and open credit.

‡End of June.

Public Debt of the United States

Source: U. S. Treasury Department.

June 30—	Gross debt	
	Amount (in millions of dollars)	Per capita (dollars)
1800*.....	\$ 83	\$ 15.87
1860.....	65	2.06
1865.....	2,678	77.07
1900.....	1,263	16.56
1915.....	1,191	11.83
1920.....	24,299	228.33
1929.....	16,931	139.40
1933.....	22,539	179.21
1939.....	40,440	308.29
1942.....	72,422	537.35
1943.....	136,696	1,001.55
1944.....	201,003	1,456.54
1945.....	258,682	1,855.90
1946.....	269,422	1,914.35

*Figures for 1800 are as of Jan. 1.

Of the \$1,873 million dollars of consumer instalment loans outstanding at the end of June 1946, commercial banks accounted for 37.4%, small loan companies 27.0%, loans insured by Federal Housing Administration for repair and modernization 13.1%, credit unions 8.0%, industrial banks 4.9%, industrial loan companies 4.3% and miscellaneous lenders 5.3%.

United States and the World Economy

U. S. FOREIGN TRADE—The United States, at the beginning of the twentieth century, became the key nation in the structure of the international economy. By far the world's greatest exporting nation, the U. S. averaged about 15 percent of total exports during the period between the two world wars; its share of the world's imports averaged from 12.4 percent in 1928 down to 4.5 percent in 1938, exceeded only by those of the United Kingdom. In raw materials, the United States was the most important supplier.

The United States accounted for about 25 percent of the world's production of manufactured goods during the war years. The industrial output of the United States during the period of 1925-1929 was estimated by the League of Nations at 46 percent of the world's total. In terms of world purchasing power, in 1929, that of the United States was believed to be as great as that of 23 foreign nations combined, including the United Kingdom, Germany, and France.

Table I in the adjoining column represents total United States exports and imports of merchandise from 1918 to 1945. The statistics for foreign trade after 1919 reflect the effects of war and are in a way characteristic of normal commerce rather in quantity, value, or character. Of the tremendous export total in 1944 of \$14,163 million (excluding direct shipments to our armed forces), lend-lease shipments accounted for \$11,298 million. Total im-

TABLE I
United States Exports and Imports
1918-45

(in millions of dollars)

Source: U. S. Bureau of Foreign and Domestic Commerce; U. S. Bureau of the Census.

	Exports of U. S. merchandise			Imports for consumption
	Total	Lend-lease	Cash	
1918.....	6,048	.....	6,048	2,952
1919.....	7,750	.....	7,750	3,828
1920.....	8,080	.....	8,080	5,102
1929.....	5,157	.....	5,157	4,339
1930.....	3,781	.....	3,781	3,114
1931.....	2,378	.....	2,378	2,088
1932.....	1,576	.....	1,576	1,325
1933.....	1,647	.....	1,647	1,433
1934.....	2,100	.....	2,100	1,636
1935.....	2,243	.....	2,243	2,039
1936.....	2,419	.....	2,419	2,424
1937.....	3,299	.....	3,299	3,010
1938.....	3,057	.....	3,057	1,950
1939.....	3,123	.....	3,123	2,276
1940.....	3,934	.....	3,934	2,541
1941.....	5,020	726	4,294	3,222
1942.....	8,004	4,926	3,078	2,769
1943.....	12,841	10,340	2,501	3,390
1944.....	14,163	11,298	2,865	3,879
1945.....	9,589	5,542	4,046	4,075

ports in 1944 amounted to \$3,921 million but many of the imported goods reflected war demand and were drawn from unusual sources. Table II gives a breakdown of the lend-lease assistance rendered by the United States to Allied countries.

TABLE II
Lend-lease Aid Rendered by U. S., March 11, 1941, to September 30, 1945
(in millions of dollars)

Item	Total	American Republics	British Commonwealth	China	France	USSR	Other	Not assigned
Airplane.....	4,228	43	3,025	165	172	783	36	4
Aircraft.....	8,033	142	5,924	113	218	1,549	87	.....
Automobiles and other vehicles.....	6,094	66	3,777	101	312	1,791	20	27
Automobiles.....	4,560	87	3,377	2	167	551	39	336
Small arms and miscellaneous military equipment.....	3,137	43	1,980	69	237	767	16	25
Cultural and industrial commodities.....	5,052	.....	3,276	3	8	1,688	77	.....
Foodstuffs.....	650	.....	628	.....	.....	20	2	.....
Other agricultural products.....	1,451	3	430	9	7	998	4	.....
Industrial equipment.....	2,134	4	1,260	15	28	763	64	.....
Metals and minerals.....	2,316	.....	2,181	7	4	123	1	.....
Petroleum products.....	1,491	8	1,002	12	84	375	10	.....
Other industrial products.....	465	1	229	4	7	222	2	.....
Freight and accessorial charges.....	857	.....	.....	.....	.....	.....	.....	857
Unclassified.....	.....	.....	.....	.....	.....	.....	.....	.....
Utilities and equipment.....	1,020	11	448	9	2	548	.....	1
Machinery and equipment.....	703	.....	.....	.....	.....	.....	.....	703
Production facilities in U. S.....	2,596	*	1,962	16	117	467	34	.....
Tonnage of ships, etc.....	734	3	530	.....	28	128	23	20
Pricing of defense articles.....	519	9	240	107	15	28	6	115
Cellaneous services and expenses.....	46,040	421	30,269	632	1,407	10,801	422	2,088

Less than \$500,000.

During the twenties the ratio of exports to the total production of movable goods averaged about 10 percent. Table III, showing the ratio between exports and the total production of movable goods, indicates that, while this proportion declined during the thirties and stood at 7.7 percent in 1937, it increased to 12 percent during 1944.

TABLE III

United States Production of Movable Goods, Value of Exports, and the Proportion Exported in Selected Years
(in billions of dollars)

Source: U. S. Department of Commerce.

Year	Production of movable goods	Exports	Exports as percentage of production
1914.....	20.2	2.1	10
1919.....	47.5	7.8	16
1921.....	33.9	4.4	13
1925.....	47.2	4.8	10
1927.....	47.5	4.8	10
1929.....	53.2	5.2	10
1937.....	44.0	3.3	7½
1939.....	41.9	3.1	7½
1941.....	64.2	5.0	8
1943.....	113.1	12.6	11
1944.....	114.8	14.2	12
1945.....	102.9	9.6	9

On the other hand, the ratio of United States commodity imports to national income ranged in percentage during the interwar period from a high of 7.6 in 1920 to a low of 3.1 in 1938. During the ten-year period, 1919 to 1928, the average percentage was 5.6 while, during the thirties, it declined to 3.6 percent.

In view of the percentage of movable goods exported and the small ratio of commodity imports to national income there is widespread belief that foreign trade is not important to this country. This view overlooks the importance of export markets to particular industries and the strategic character of many imports. Among its agricultural products the U. S. in 1939 exported 34.4 percent of its output of leaf tobacco, 28.4 percent of cotton (in 1933 the percentage was 65.6), 13.6 percent of lard (34.8 percent in 1933), and 36 percent of dried fruits. Among manufactured products exports accounted for 33 percent of the production of aircraft and parts, 31.6 percent of sewing machines, 22 percent of office appliances, 19.4 percent of tractors and 23 percent of mining machinery. Exports also accounted for 33.6 percent of lubricating oils, 50.1 percent of paraffine wax, 28.1 percent of sulphur, 37.6 percent of carbon black and 33.3 percent of gum turpentine.

Tables IV and V list the principal United States commodity exports and imports from 1936 to 1945:

TABLE IV

U. S. Exports of Leading Commodities
(in millions of dollars)

Source: U. S. Department of Commerce.

	1936-38 average	1939-41 average	1942-44 average	1945
Crude materials				
Cotton, unmanufactured	319.4	179.6	132.5	278.7
Tobacco, unmanufactured	142.5	62.3	128.2	239.1
Coal	56.2	86.1	160.1	184.3
Crude petroleum	91.4	70.0	59.0	58.3
Foodstuffs				
Meats and edible fats	43.3	75.4	634.3	390.1
Dairy products and eggs	5.7	52.2	441.9	424.9
Fruits and vegetables	98.1	81.1	156.3	273.8
Wheat, including flour	61.5	43.1	53.2	329.3
Feed grains	44.3	23.0	10.9	45.7
Sugar and related products	7.3	13.5	37.3	34.9
Manufactures				
Machinery	434.3	638.8	1,144.8	1,193.4
Automobiles and accessories	285.8	282.2	448.3	579.5
Other vehicles, excl. military	19.5	60.2	353.3	109.1
Iron and steel products	198.7	417.6	585.6	457.9
Advanced manufacturers of steel	44.4	74.6	120.5	114.9
Chemicals and related products	117.2	195.2	335.2	394.1
Petroleum products	252.9	256.6	549.9	693.3
Textiles and manufactures	87.2	152.6	378.7	477.0
Paper, paper manufactures, and wood pulp	40.2	75.0	86.8	100.8
Nonferrous metals and manufactures	105.5	159.7	257.5	105.1
Commodities for charity	—	23.3	70.3	139.1
Military exports	54.1	514.5	4,721.2	1,909.3

TABLE V

U. S. Imports for Consumption of Leading Commodities (in millions of dollars)

Source: U. S. Department of Commerce.

	1936-38 average	1939-41 average	1942-44 average	1945
Crude materials				
Wool, unmanufactured	57.4	113.0	264.4	241.2
Nonferrous ores and concentrates	31.7	76.1	153.0	131.7
Tanned furs	65.1	75.8	90.9	139.5
Crude rubber	178.5	304.5	75.5	99.0
Hides and skins	51.9	60.2	68.5	48.8
Tobacco, unmanufactured	32.6	37.2	46.4	75.4
Crude petroleum	20.9	33.0	25.5	81.0
Diamonds, rough, industrial, cuttable	12.0	21.8	53.1	56.0
Oilseeds	45.0	34.0	43.9	35.0
Pulpwoods	11.0	12.0	16.6	21.0
Raw silk	99.3	102.5	—	1.1
Foodstuffs				
Coffee	140.8	147.9	268.3	345.8
Cane sugar	151.5	130.4	168.3	201.5
Fruits, nuts, and vegetables	80.6	78.8	76.8	152.4
Grain	54.1	13.0	150.5	77.2
Fish	30.8	29.8	41.9	76.4
Alcoholic spirits and wines	68.6	53.0	79.8	61.3
Cocoa	35.2	32.9	34.6	45.9
Meats, fats, and dairy products	47.4	32.3	36.1	32.9
Tea	19.2	24.3	25.8	29.5
Molasses, including inedible	13.7	15.0	38.9	20.9
Spices	11.7	15.8	12.9	19.8
Semi-manufactures				
Nonferrous metals	146.2	260.1	304.8	409.4
Copper	34.9	80.5	148.2	182.7
Tin bars, blocks and pigs	74.9	116.2	19.1	9.1
Aluminum, metal, plates, and bars	4.5	3.9	35.7	98.3
Wood pulp	84.6	67.3	74.0	115.6
Diamonds, cut but unset	23.2	22.6	25.1	46.2
Gas and fuel oil	19.3	22.3	37.4	55.3
Sawed lumber	15.4	27.5	46.0	51.8
Vegetable oils and fats, expressed	57.0	36.4	17.3	20.2
Leather	9.5	8.2	13.1	23.0
Ethyl alcohol	—	—	8.7	19.1
Sodium nitrate for fertilizer	10.5	11.5	15.9	18.6
Finished manufactures				
Paper and manufactures	120.0	135.3	139.6	157.5
Clocks and watches	9.2	13.7	38.7	59.8
Textiles and manufactures				
Burlaps	35.0	41.6	44.5	65.4
Cotton manufactures	42.5	28.7	9.0	33.6
Wool manufactures	20.2	19.0	13.9	18.8
Flax, hemp, and ramie manufactures	26.8	18.8	7.9	7.9
Leather manufactures	9.4	4.4	8.7	17.9
Machinery	18.5	11.6	37.3	27.6
Menthol	1.0	1.0	2.9	5.0
Military imports	1.1	1.0	155.3	196.1

The exports of the United States reflect the industrial character of the country, 34.4 percent of total exports in 1939 consisting of finished manufactured goods. Semi-manufactured goods accounted for 19.7 percent, so that of total exports 54.1 percent of goods involved a variable degree of industrial processing. Foodstuffs made up 10 percent of total exports, while crude materials such as raw cotton, raw tobacco, crude petroleum and coal accounted for 16.9 percent.

Crude industrial materials represented the most important class of imported goods, amounting in 1939, to 32.7 percent of the total. Foodstuffs followed with 28.5 percent. Semi-manufactured goods constituted 21.4 percent, while our imports of finished manufactured goods amounted to 19.3 percent of the total. The industrial character of our exports was accentuated by the war. Table VI presents a breakdown of United States trade by economic classes of goods exported and imported.

TABLE VI

Merchandise Trade by Economic Class

(in millions of dollars)

Source: U. S. Department of Commerce.

	1936-38 average	1939-41 average	1942-44 average	1945
Exports of U. S. merchandise	2,925	4,026	11,669	9,589
Crude materials	669	457	545	875
Foodstuffs	306	352	1,473	1,678
Semimanufactures	519	757	1,035	782
Finished manufactures, excluding military	1,378	1,946	3,895	4,344
Military equipment	53	515	4,721	1,909
Imports for consumption	2,461	2,680	3,346	4,075
Crude materials	760	1,044	1,052	1,165
Foodstuffs	720	622	997	1,155
Semimanufactures	503	590	674	928
Finished manufactures, excluding military	477	423	467	632
Military equipment	1	1	155	196

Tables VII and VIII list the principal foreign markets for United States exports and the leading sources of American imports

during the period 1936-38 and for the last quarter of 1945.

TABLE VII

The Ten Best Customers of the United States

4th quarter 1945 and 1936-38 average

Source: U. S. Department of Commerce.

Country	Average Monthly U. S. Exports		1936-38 av.	
	4th quart. 1945 Millions of dollars	Rank	Millions of dollars	Rank
Canada.....	93.9	1	37.8	2
France.....	57.0	2	11.9	4
United Kingdom.....	49.6	3	41.6	1
U. S. S. R.....	37.6	4	4.1	17
Mexico.....	30.7	5	6.9	6
Brazil.....	21.4	6	5.0	15
Italy.....	20.6	7	5.4	14
Cuba.....	18.5	8	6.6	9
Belgium.....	17.9	9	6.4	12
Poland.....	15.9	10	2.0	21
Japan.....	...	...	20.4	3
Germany.....	.3	...	9.3	5
Netherlands.....	12.5	...	6.8	7
Argentina.....	5.3	...	6.6	8
British South Africa..	12.4	...	6.5	10

TABLE VIII

The Ten Largest Suppliers of United States Needs

4th quarter 1945 and 1936-38 average

Source: U. S. Department of Commerce.

Country	Average Monthly U. S. Imports		1936-38 av.	
	4th quart. 1945 Millions of dollars	Rank	Millions of dollars	Rank
Canada.....	75.7	1	28.7	1
Brazil.....	24.5	2	8.9	7
Argentina.....	18.7	3	6.8	9
Mexico.....	17.7	4	4.4	15
Cuba.....	15.7	5	10.6	5
India.....	13.4	6	6.2	12
British South Africa..	12.1	7	1.3	29
Switzerland.....	11.8	8	2.0	24
Australia.....	11.3	9	2.1	23
Sweden.....	9.9	10	4.2	16
British Malaya.....	1.9	...	14.5	2
United Kingdom.....	6.9	...	14.5	3
Japan.....	...	...	14.0	4
Philippines.....	.2	...	8.9	6
Netherlands E. Indies.	.2	...	7.0	8
Germany.....	...	...	6.6	10

U. S. FOREIGN INVESTMENTS—Before the First World War the United States was a debtor nation on capital account; foreign investments in the United States exceeded United States investments abroad by \$3.7 billions in 1914. World War I, however, completely changed this condition and by the end of 1919, United States investments abroad exceeded foreign investments in the United States by approximately \$3.7 billion. As a result of the great expansion of American foreign investments during the thirties, our net creditor position, excluding war debts, stood at \$8.8 billion in

1930 as compared with \$3.7 billion in 1914.

Foreign holdings in the United States on the other hand, increased tremendously during the period 1933-39. Foreign capital, seeking safety from possible currency devaluation and the uncertainties of war, sought refuge through conversion into dollar holdings. Short-term dollar holdings of foreigners increased \$2.8 billion between 1933 and 1939, while foreign holdings of American securities largely purchased in the stock market, increased by \$1.4 billion. At the end of 1939, the net creditor position of the U. S. had declined to \$1.8 billion

This movement gave way in 1940-41 to reduction of foreign holdings, principally British, to finance war purchases here. After the entry of the United States into the war, however, foreign holdings in the United States increased as government expenditures abroad for the procurement of materials and for the pay and maintenance of troops resulted in substantial acquisitions of dollar balances by foreign countries. Table IX shows the international investment position of the United States, as of September 1944. Since there has been an increase in foreign short-term holdings in the United States since September 1944, it is probable that the net debtor position of this country at the beginning of 1946 is somewhat larger than the \$1.2 billion shown in Table IX.

TABLE IX

International Investment Position of the United States, September 1944

(In billions of dollars)

Source: U. S. Department of Commerce.

Assets (U. S. investments abroad):	
Long-term:	
Direct.....	7.3
Foreign dollar bonds.....	1.7
Miscellaneous private.....	1.0
U. S. Government.....	.6
Total long-term.....	10.6
Short-term:	
Private.....	.3
Official.....	.2
Total short-term.....	.5
Total assets.....	11.1
Liabilities (Foreign investments in the U. S.):	
Long-term:	
Direct.....	2.2
Preferred and common stocks.....	2.7
Corporate and government bonds.....	.7
Miscellaneous.....	.6
Total long-term.....	6.2
Short-term:	
Private.....	2.8
Official.....	3.3
Total short-term.....	6.1
Total liabilities.....	12.3
Net creditor (+) or debtor (-) position of the U. S.:	
On long-term account.....	+4.4
On short-term account.....	-5.6
Net position.....	-1.2

These increased foreign holdings do not represent permanent investments in this country. They represent funds which were sent here for safekeeping, capital that fled because of fear of war and devaluation. The end of the war found Europe devastated and hungry, needing billions of dollars

worth of goods for reconstruction and rehabilitation. Other areas, not devastated by war, such as South American countries, have a tremendous back log of demand for American products which could not be obtained during the war. These funds which have been built up since 1935, consequently, will shortly be drawn upon to pay for American exports.

INTERNATIONAL BANK—Foreign demands for reconstruction during the post-war period are expected to be so great that accumulated foreign holdings will fall short of what will be required. To overcome the shortage of foreign purchasing power and to supply needed capital abroad, important new credit institutions have been established and the lending power of existing agencies has been increased. The capital and lending power of the Export-Import Bank was increased to \$3.5 billions in July 1945 and the Bank had outstanding foreign commitments of \$1.5 billion at the end of 1945. The President has recommended to Congress that the Bank's lending power be increased by an additional \$1.25 billion.

TABLE X

Percentage Distribution of Voting Power and Subscriptions to the International Bank

Source: Federal Reserve Board.

	Intern'l Bank	Total subscription Millions of \$	Percent of total
United States.....	37.1	3,175	41.4
United Kingdom.....	15.4	1,300	17.0
China.....	7.3	600	7.8
France.....	5.5	450	5.9
India.....	4.9	400	5.2
Canada.....	4.1	325	4.2
Netherlands.....	3.5	275	3.6
Belgium.....	2.9	225	2.9
Latin America, total.....	8.0	288	3.8
Other countries.....	11.4	632	8.2
Total.....	100.0	7,670	100.0

In addition, the United States has joined with 33 other countries to establish an International Bank for Reconstruction and Development. This was one of the institutions created under the Bretton Woods Agreement, of 1944. The Bank has an authorized capital of \$10 billion to which each member nation must subscribe. The Bank's transactions are limited to its unimpaired subscribed capital, reserves, and surplus.

At present, the total subscription to the capital of the Bank is \$7.6 billion, of which \$3.175 billion represents the subscription of this country. The United States has subscribed 41.78 percent of the Bank's total capital and holds 37.87 percent of its

voting control. The Union of Soviet Socialist Republics, which participated in the Bretton Woods conferences, has not joined either the Bank or the Monetary Fund.

The Bank will supply capital to facilitate the restoration and reconstruction of member countries devastated by war and the development of less advanced member countries. The Bank may operate in three different ways. It may make direct loans out of its own paid-in funds, make loans out of funds raised by selling its own bonds, or guarantee loans made by private investors through ordinary investment channels. Since the paid-in funds will not exceed 20 percent of total subscriptions, it is expected that the operations of the Bank will consist largely of guaranteeing loans made through usual investment channels and of making loans with funds obtained through the sale of its own obligations. The loans guaranteed by the Bank will be floated, for the most part, in this country. Moreover, since the United States appears to be the most abundant source of investment capital, sales of the Bank's obligation will be largely carried out in this country.

FOREIGN EXCHANGE—One of the most obvious differences between foreign and ordinary domestic trade is the fact that the buyer and seller use different currency units. The United States exporter wants payments in dollars; the Brazilian importer uses cruzeiros in making his purchases and sales. The price which the American importer pays for the foreign currency is called the rate of exchange. Like all prices, exchange rates are determined by the forces of supply and demand. American importers offer dollars to the banks in order to obtain foreign purchasing power. Consequently, importers and those who are making foreign payments, such as tourists traveling abroad, persons sending funds to relatives in foreign countries, and businessmen paying premiums to insurance companies abroad, create a demand for foreign currencies. Exporters selling to foreign buyers, motion picture companies receiving royalties on films exhibited abroad and investors receiving interest on foreign investments, create the supply of foreign currencies since the foreign debtor must offer his own currency to obtain the dollars with which to make payment to the American creditor.

A world picture of total supply of and demand for dollars over a period of a year is presented by the annual summary of our international balance of accounts which appears in Table XI.

TRADE AGREEMENTS—The economic warfare of the thirties brought economic distress to all of the nations of the world—to those imposing the trade restrictions as

well as those against whom the restrictions were aimed. This economic warfare was one of the most potent causes of the Second World War.

The realization of this truth has had important results in planning for the post-war period. The United States has taken the lead in proposing the renunciation of economic warfare and a cooperative approach to the restoration of world trade and prosperity. The American plan included the scaling down of tariffs through agreements with other countries under our Reciprocal Trade Agreements program; commitments on the part of the nations of the world to eliminate trade restrictions and interferences of all kinds; formation of an International Trade Organization as an adjunct of the United Nations; the Monetary Fund, established under the Bretton Woods agreements, to promote and encourage international trade by insuring stability of exchange rates and by making available supplies of scarce currencies; a loan program to assist in the reconstruction and development of the countries of the world and to assist important trading nations such as the United Kingdom and France at a time when their international position is likely to be weak because of their tremendous need of imports and their inability to provide through exports the credits required to finance their imports.

The Reciprocal Trade Agreements Act was originally passed in 1934 and was extended in 1945 for a two-year period. Under the provisions of the Act, the President is authorized to seek concessions from foreign countries for American trade and commerce in return for similar concessions granted their products by the United States. The President has the power to increase or decrease tariff rates (under the 1945 extension, those in effect on January 1, 1945) by 50 percent. He may not, however, transfer goods from the dutiable to the free list nor vice versa. Since 1934, reciprocal trade agreements have been concluded with 28 countries, with whom we did 65 percent of our normal foreign trade, and which include eight of our ten best customers in 1937. The effectiveness of the Act in promoting international trade and creating domestic employment is difficult to gauge because of the outbreak of the World War in 1939. However, between the years 1934-35 and 1938-39 our exports to trade agreements countries rose by 63 percent, while our export to non-trade agreements countries rose by only 32 percent. Our imports from agreement countries increased by 22 percent and our imports from non-agreement countries by only 13 percent. The countries with which reciprocal trade agreements have been effected are listed in Table XII.

TABLE XI
International Transactions of the United States, 1945
 (in millions of dollars)

Item	Private	U. S. Government	Total
Receipts:			
Goods and services:			
Goods.....	3,437	7,391	10,828
Income on investments.....	495	21	516
Other services.....	558	1,015	1,573
Total goods and services.....	4,490	8,426	12,917
Unilateral transfers.....	70	1,805	1,875
Long-term capital:			
Movements of U. S. capital invested abroad.....	272	76	348
Movements of foreign capital in U. S.....	30	.....	30
Total long-term capital.....	303	76	379
Total receipts.....	4,863	10,308	15,171
Payments:			
Goods and services:			
Goods.....	2,906	3,270	6,176
Income on investments.....	170	10	180
Other services.....	513	1,863	2,376
Total goods and services.....	3,588	5,143	8,731
Unilateral transfers.....	595	5,544	6,139
Long-term capital:			
Movements of U. S. capital invested abroad.....	224	1,803	2,027
Movements of foreign capital invested in U. S.....	129	.....	129
Total long-term capital.....	353	1,803	2,156
Total payments.....	4,536	12,490	17,026
Excess of receipts (+) or payments (-):			
Goods and services.....	+902	+3,283	+4,185
Unilateral transfers.....	-524	-3,739	-4,263
Net goods and services and unilateral transfers.....	+378	-455	-77
Long-term capital.....	-51	-1,727	-1,778
Net transactions.....	+327	-2,182	-1,855
Net flow of funds on gold and short-term capital account:			
Net gold movement.....	.....	+506	+506
Net movement of U. S. short-term capital abroad.....	-48	+95	+47
Net movement of foreign short-term capital in U. S.....	+408	+1,029	+1,437
Net inflow (+) or outflow (-).....	+360	+1,631	+1,991
Errors and omissions.....	.....	.....	-136

TABLE XII
U. S. Trade Agreements Signed¹

Country	Signed	Effective	Country	Signed	Effective
Bahamas.....	Aug. 24, 1934	Sept. 3, 1934	Ecuador.....	Aug. 6, 1938	Oct. 23, 1938
Brazil.....	Feb. 2, 1935	Jan. 1, 1936	United Kingdom.....	Nov. 17, 1938	Jan. 1, 1939
Belgium (and Luxemburg).....	Feb. 27, 1935	May 1, 1935	Canada (second agreement).....	Nov. 17, 1938	Jan. 1, 1939
Bolivia.....	Mar. 28, 1935	June 3, 1935	Turkey.....	Apr. 1, 1939	May 5, 1939
Denmark.....	May 25, 1935	Aug. 5, 1935	Venezuela.....	Nov. 6, 1939	Dec. 16, 1939
Sweden.....	Sept. 13, 1935	May 20, 1936	Cuba (first supplementary agreement).....	Dec. 18, 1939	Dec. 23, 1939
Ecuador.....	Nov. 15, 1935	Jan. 1, 1936	Canada (supplementary fox-fur agreement) ⁴	Dec. 13, 1940	Dec. 20, 1940
France.....	Dec. 18, 1935	Mar. 2, 1936	Argentina.....	Oct. 14, 1941	Nov. 15, 1941
Guatemala.....	Dec. 20, 1935	Feb. 1, 1936	Cuba (second supplementary agreement).....	Dec. 23, 1941	Jan. 5, 1942
Holland.....	Jan. 9, 1936	Feb. 15, 1936	Peru.....	May 7, 1942	July 29, 1942
Paraguay.....	Mar. 11, 1936	Oct. 1, 1936	Uruguay.....	July 21, 1942	Jan. 1, 1943
Costa Rica.....	Apr. 24, 1936	June 15, 1936	Mexico.....	Dec. 23, 1942	Jan. 30, 1943
Czechoslovakia.....	May 6, 1936	June 15, 1936	Iran.....	Apr. 8, 1943	June 28, 1944
Denmark.....	May 18, 1936	Nov. 2, 1936	Iceland.....	Aug. 27, 1943	Nov. 19, 1943
France.....	Nov. 28, 1936	Aug. 2, 1937			
Guatemala.....	Feb. 19, 1937	May 31, 1937			
Holland.....	Mar. 7, 1938	Apr. 16, 1938			

¹Negotiations are in progress with Paraguay; negotiations with Bolivia are inactive.

²The duty concessions and certain other provisions of this agreement ceased to be in force as of Mar. 1, 1938.

³The operation of this agreement was suspended as of Apr. 22, 1939.

⁴This replaced a previous supplementary agreement relating to fox furs, signed on Dec. 30, 1939.

TABLE XIII

**Percentage Distribution of Voting Power
and International Monetary Fund
Quotas of Member Countries**

Source: Federal Reserve Board.

	Intern'l fund	Amount of (\$)	Percent total
United States.....	33.1	2,750	37.2
United Kingdom.....	15.8	1,300	17.6
China.....	6.9	550	7.4
France.....	5.7	450	6.1
India.....	5.1	400	5.4
Canada.....	3.9	300	4.1
Netherlands.....	3.6	275	3.7
Belgium.....	3.0	225	3.0
Latin America, total.....	10.7	469.5	6.3
Other countries.....	12.3	678	9.1
Total.....	100.0	7,397.5	100.0

BRETTON WOODS MONETARY FUND.

The Monetary Fund was established to promote world trade by insuring the stability of foreign exchange rates. Exchange instability had made international trade difficult during the thirties. Member nations under the agreement are bound to maintain stable exchange rates and may not use exchange depreciation as a competitive weapon in seeking to expand foreign markets for their products. No appreciable change in the exchange value of its currency may be made by a member nation without the approval of the Fund, and the Fund's approval will not be given

unless the change in value is necessary to correct a fundamental maladjustment in a nation's international economic position. In addition, the Fund provides for the elimination of exchange controls which had so greatly hampered trade during the thirties. During a transitional period of five years, however, exchange controls may be retained, provided they are administered so as to avoid discrimination against any particular member country.

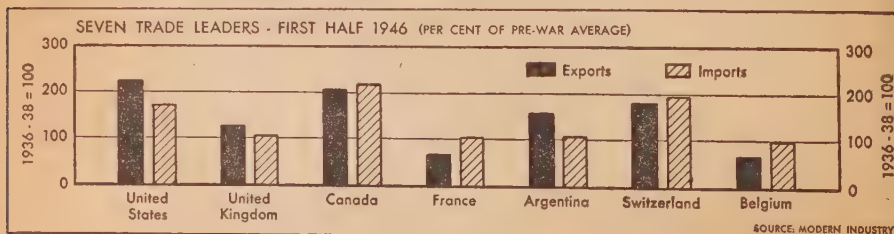
At present, 39 nations are members of the Monetary Fund and their subscriptions total approximately \$7.4 billions. The United States' subscription is \$2.75 billions, which represents 37.2 percent of the total subscription and this country exercises 33.1 percent of the voting control of the Fund. The Fund is essentially a pool of the world's currencies and exchange rates are stabilized by the Fund's readiness to make available the desired currency of another nation in return for a country's own currency at a fixed rate. Safeguards are provided in the Fund agreement to guard against the depletion of the Fund's supply of a currency which may become scarce—that is, a currency the world demand for which exceeds the available supply. The Fund has not as yet begun operations and initial exchange rates have not been established. Table XIII lists the subscription and voting power of member nations of the Fund and Table XIV foreign exchange rates from 1937 to 1946 as reported by the Board of Governors of the Federal Reserve System.

TABLE XIV

Foreign Exchange Rates (in United States cents)

	United Kingdom (pound)	France (franc)	Germany (reichs- mark)	Italy (lira)	Sweden (krona)	Nether- lands (guilder)	Canada (dollar)	Argentina* (peso)	Brazil (cruzeiro)	Japan (yen)	China (Shanghai yuan)
1937	494.40	4.05	40.20	5.26	25.49	55.05	100.00	32.96	6.20	28.79	29.61
1938	488.94	2.89	40.16	5.26	25.20	55.01	99.42	32.60	....	28.45	21.36
1939	443.54	2.51	40.06	5.20	23.99	53.34	96.02	30.85	5.12	25.96	11.88
1940	383.00	2.08	40.02	5.04	23.80	53.13	85.14	29.77	5.02	23.44	6.00
1941	403.18	....	39.97	5.07	23.83	....	87.35	29.77	5.07	23.44	5.31
1942	403.50	....	....	....	....	....	88.38	29.77	5.14	....	....
1943	403.50	....	....	....	....	....	89.98	29.77	5.13	....	....
1944	....	....	....	....	....	....	89.85	29.77	5.15	....	....
1945	403.02	1.97	....	....	....	37.93	90.49	29.77	5.18	....	....
1946	....	....	....	....	....	....	....	....	....	....	....
June 1946	403.37	.84	100.00†	.44	23.85	37.79	90.60	29.77	5.19	100.00†	‡

*Official rate. †No commercial trading. Rates quoted are those of U. S. Commercial Company; in Germany trading only in American Zone of Occupation. ‡\$280,000.



MAJOR LABOR EVENTS IN 1946

In 1946, the unions pressed their demands, held down during the war under a wage stabilization program. They sought to recoup losses in take-home pay occasioned by the decline in overtime. Strikes swept basic industries in the first half of the year, filtering through the rest of the economy. Many settlements were achieved only by government intervention.

The same release from wartime pressure enabled the Congress of Industrial Organizations and the American Federation of Labor to resume jurisdictional warfare. In all these labor disturbances legislation regulating some aspects of union activity was encouraged for the first time in a decade.

Union Demands and Strikes

Early 1946 found 200,000 members of the United Automobile Workers, CIO, on strike against General Motors. The strike began November 21, 1945 and did not end until March 13, 1946. A fact-finding board, appointed by President Truman, on January 10, 1946, recommended a wage increase of 19½ cents an hour or about 17½ percent, against the UAW demand of 30 percent. On January 28, 1946, the Secretary of Labor designated a special mediator. A final settlement, accepted by the union on March 13, resulted in a 18½ cent increase.

A 30 percent increase thereafter became a general demand. The United Steelworkers of America, CIO, walked out on January 19, 1946, asking a \$2 a day wage increase. The largest strike in the history of the country, it involved 750,000 workers and directly affected 1,200 plants. On January 17, 1946, President Truman, hoping to avert the strike, had proposed a wage increase of 15½ cents per hour as the basis of settlement; this was accepted by the union but the industry replied that existing OPA ceiling prices did not permit the increases. On February 15, 1946, the union and the United States Steel Corporation agreed to a wage increase of 18½ cents per hour, with an average increase in ceiling price of 15 percent, which was announced simultaneously with a revised national wage-price policy.

In the electrical industry 200,000 electrical workers, members of the United Electrical, Radio, and Machine Workers of America, CIO, struck for a \$2 a day increase in 75 plants of the General Electric Company, the Westinghouse Electric and Manufacturing Company, and the electrical divisions of General Motors Corporation. The strike at General Motors was settled on February 9, 1946, on the basis of a 18½ cents per hour increase, while the

company's automotive employees were still demanding 19½ cents per hour. The strikes at General Electric and Westinghouse were long continued, even after conciliators appointed by the Secretary of Labor attempted to mediate. After 115 days, the union accepted 18 cents.

The wage increase pattern of 18½ cents an hour was accepted by the Wage Stabilization Board (successor to the War Labor Board) as an approvable standard; such increases were permitted to serve as a basis for price relief from OPA. Throughout all these strikes, the link between wages and prices was underscored by industry, and the resulting pattern of permissible increases was generally applied to other industries.

In April, John L. Lewis opened negotiations with the coal operators for a renewal of the AFL United Mine Workers' contract, but presented no specific demands. Adopting a new tack, the miners' chief called on the coal operators to accept the principle of an employee welfare fund, after which he would then proceed to bargain as to details. On the refusal of the operators, the coal mines were struck, leading to government seizure. A contract negotiated between the government and the union granted the Lewis demands. The coal mines remained in the hands of the government until the operators would agree to assume the obligations of the agreement.

In May, the Brotherhood of Railway Trainmen and the Brotherhood of Locomotive Engineers, both independent, went out on strike, the central issue revolving around working rules. President Truman's denunciation of the unions and his demand for drastic anti-labor legislation led to the calling off of the strike which had thrown the railroads into confusion.

For the most part, the AFL negotiated quietly, avoiding strikes, its members deriving the benefits of the general 18½ cents pattern. In September, however, the AFL found itself involved in two major strikes, that of the Seafarers' International Union and Local 807 of the Teamsters Union in New York. The SIU had obtained agreement from the employers to grant wage increases higher than those won by the National Maritime Union earlier in the year; but the Wage Stabilization Board refused approval on the ground that the increases would lead to a "second round" of wage demands, thus heightening the inflationary pressure. The effect of the two transportation strikes was to cripple the movement of goods and seriously curtail industrial and business operations. In the end, however, the government amended its wage stabilization policy and approved the seamen's demands.

Union Factionalism

The rift between the AFL and the CIO continued to widen during 1946. The contraction of war industries encouraged both the AFL and the CIO to intensify their jurisdictional disputes. Announcement of a southern organization drive by the CIO was met by the launching of an AFL campaign in the same territory. John L. Lewis's return to the AFL was generally believed to portend an anti-CIO drive by the Federation.

Many CIO unions were torn by factional fights between rightwingers and alleged followers of the Communist Party line which had changed with the expulsion of Earl Browder from party leadership and the return of William Z. Foster. President of the CIO's United Furniture Workers resigned on the ground that the union had fallen under communist domination; similar controversies arose in the United Shoe Workers, the Shipyard Workers, the Coke and Chemical Workers, the National Maritime Union, the Mine, Mill and Smelter Workers. In the United Electrical Workers, an opposition group was organized to oppose the fellow traveler leadership.

The AFL's internal difficulties continued to result from jurisdictional disputes between AFL internationals. As a result, the AFL lost the Amalgamated Lithographers and the Brewery Workers to the CIO. Similarly, the International Association of Machinists withdrew from the AFL but remained independent.

Court Decisions

While there were no startling decisions, two cases did attract considerable attention:

1. **Foremen's unionization under the Wagner Act.** The Sixth Circuit Court on August 12, 1946, sustained NLRB's decision in the Packard case which held that employers must bargain with foremen's unions.

2. **Veterans' superseniority.** On May 27, 1946 the Supreme Court rejected the Selective Service Administration's interpretation of the reemployment provisions of the Selective Service Act. A veteran rehired after his discharge from the armed forces resumes seniority at the "precise point he

would have occupied had he kept his position continuously during the war." Selective Service had argued that the veteran must be retained for one year without regard to the seniority rights of other employees.

Legislation

Labor's position on the legislative front was seriously weakened in 1946. Restrictive legislation of a permanent character—a distinguished from the emergency War Labor Disputes Act—was enacted. The Labor Act, directed at the featherbedding practiced by James C. Petrillo's American Federation of Musicians, became law on April 16, 1946. The Hobbs Anti-Racketeering Act intended to curb certain activities of the Teamsters Union, became law on July 2, 1946.

Major restrictions on labor unions were enacted by Congress in the Case Bill but were vetoed by President Truman. The bill called for a cooling-off period before strikes; compulsory bargaining by union as well as employers; use of employee welfare funds for specified purposes and under joint employer-union control; permitting damage suits for violation of a collective bargaining agreement by either management or the union; issuance of injunction for misconduct during strikes and denial of Wagner Act rights to offenders; outlawing of secondary boycotts; and exclusion of supervisors from the protection of the Wagner Act. The President vetoed this legislation and urged, instead, enactment of emergency legislation permitting government seizure of struck plants and the drafting of strikers who refused to return to work. In addition, the President called for a six-month period in which Congress would have the opportunity to study permanent legislation.

Pro-labor legislation suffered Congressional defeat. Bills to amend the Fair Labor Standards Act, increasing minimum wages, and to establish a Fair Employment Practices Committee died in committee. Labor's major legislative defeat was its failure to maintain an unimpaired OPA, a result of which its real take-home pay, despite the successful strikes, took a further cut in addition to the losses due to reduction in overtime.

Terms Used in Labor Relations

ARBITRATION—Referring disputes between employers and employees to the binding decision of impartial referees, arbitrators, or umpires.

BARGAINING UNIT—A group of employees composed of workers in a single craft, plant, company, area, or industry for purpose of bargaining collectively with their employer or employers. Such units

may be determined by traditional grouping of workers, or by NLRB or a state labor relations board.

BOYCOTT—A concerted effort by union to withhold or induce others to withhold the purchase of goods or services of an employer involved in a labor dispute. *Secondary boycotts* generally apply to union efforts to induce parties not directly

ved in a labor dispute to refrain from organizing the employer with whom the man has a labor dispute.

CERTIFICATION—An official order of the National Labor Relations Board, the National Mediation Board, or a state labor relations board specifying that a union is free from employer domination, includes a majority of the employees in an appropriate unit in its membership, and is authorized to act as the collective bargaining agent for all the employees in the unit.

CHECKOFF—Employer deduction of union dues from the pay envelope of union members and payment of the funds to the union.

CLOSED SHOP—An employer may hire only members of the contracting union and must continue to remain members in order to stand to keep their jobs.

CLOSED UNION—A union which, through high initiation fees or restrictive membership rules, seeks to limit the size of its membership in order to protect their opportunities. (See *Union shop*.)

COLLECTIVE BARGAINING—The process of negotiation between employer and union for the purpose of reaching an agreement as to the terms and conditions of employment for a specified period.

COMPANY UNION—An employee organization whose membership is limited to the employees of a single plant or company. The term is frequently used to denote a company-dominated union, now illegal under the Wagner Act.

CRAFT UNION—Jurisdiction limited to one or several allied skilled trades.

DISCRIMINATION—Unfair treatment of workers in matters affecting their employment status; usually applied to employer discrimination against union members under the National Labor Relations Act, or State Labor Relations Act.

EMPLOYEE WELFARE FUNDS—Funds consisting of employer or joint employer-employee contributions based upon percentage of payroll or number of units deducted, used in behalf of union members for health insurance, hospitalization, vacations, disability, and retirement. Administration of the fund may be by union, employer, or jointly.

FEATHERBEDDING—Union work rules which limit output or utilization of manpower of machines.

ILLEGAL STRIKE—A work stoppage by union members in violation of a no-strike clause, or one which has not been properly called upon or authorized by the proper union officials.

JURISDICTIONAL DISPUTE—A dispute between two or more unions over the right to organize the employees in a particular trade, industry or plant.

LOCKOUT—A shutdown of operations by an employer to secure acceptance of his terms or in protest against union demands.

MAINTENANCE OF MEMBERSHIP—Employees who are union members at the time the contract is signed and those who subsequently join the union must continue their membership as a condition of continued employment during the contract term.

MEDIATION—The process of attempting to reach a settlement or an agreement through the efforts of an outside person or agency such as the U. S. Conciliation Service.

OPEN SHOP—Union membership is not a condition of employment.

PICKETING—Stationing one or more persons of a labor organization at the plant gates or shop doors of an employer during a labor dispute for the purpose of informing the public generally and the employees that a dispute exists, persuading workers to join or continue a strike, and preventing persons from entering or going to work. If large numbers participate in parading or walking up and down in front of the struck premises, this is known as *mass picketing*.

SENIORITY—Job rights based on length of service; measured in relation to other employees, to a particular job or to employment in a department, division, plant, or company.

SHOP STEWARD—A person elected by the employees within a plant or department to represent them in the adjustment of grievances with the employer.

STRIKE—A temporary work stoppage by employees as a form of economic pressure to enforce a demand for wage increases, improved working conditions, or to secure action on a grievance.

UNFAIR LABOR PRACTICES—The National Labor Relations Act defines these as: (1) Interference by employer with, restraint, or coercion of employees in the exercise of their right to self-organization and collective bargaining. (2) Employer domination or interference with the formation or administration of any labor organization or grant of financial or other support. (3) Discrimination in regard to hire or tenure of employment or any term or condition of employment by an employer in order to encourage or discourage membership in any labor organization. (4) The discharge or discrimination of an employee who files charges or gives testimony under the Act. (5) Refusal to bargain collectively with the representatives of employees.

UNION SECURITY—The closed or union shop or maintenance of membership. (See each term.)

UNION SHOP—All employees after hiring or within a specified period must become and remain members of a union.

WORKMEN'S COMPENSATION—Insurance systems established by law in various states providing payment to workers who suffer physical injury during their course of employment, irrespective of carelessness of worker or negligence of employer.

YELLOW-DOG CONTRACT—An agreement signed by an employee with his employer as a condition of employment, setting forth the employee's promise that he would not join a labor union or otherwise participate in any concerted action. Such contracts are now outlawed by the National Labor Relations Board under the terms of the Wagner Act.

Directory of Government Labor Agencies

Department of Labor—Principal operating units are: The Bureau of Labor Statistics, Division of Labor Standards, U. S. Conciliation Service, Wage and Hour and Public Contracts Divisions, Women's Bureau, Children's Bureau. Principal offices—Labor Department Building, Constitution Avenue at 14th Street, Washington, D. C. Secretary of Labor, Lewis B. Schwellenbach.

1. Bureau of Labor Statistics: Acquires and distributes labor information and publishes the results of special studies on various aspects of the labor field, such as wages in different industries; effects of the war on employment, production, and labor conditions; productivity of labor and industry; and industrial relations. This information is issued in special bulletins and in the Monthly Labor Review. The Bureau maintains eight Regional Offices throughout the country with its principal office in the Labor Department Building, Washington, D. C.

2. Division of Labor Standards: Established in 1934 to develop desirable labor standards in industrial practice, labor law administration and labor legislation, and to make specific recommendations concerning methods and measures designed to improve the working conditions and the economic position of wage earners.

3. U. S. Conciliation Service: Under the Director of Conciliation, Edgar L. Warren, the Conciliation Service operates 25 field offices in 21 states with its main office in the Department of Labor Building, Washington, D. C.

4. Wage and Hour and Public Contracts Divisions: Enforce minimum wage and overtime pay requirements of Federal laws. (See *Labor Legislation*.)

5. Women's Bureau: Charged with formulating standards and policies for promoting the welfare of wage-earning women, improving their working conditions, increasing their efficiency, and advancing their opportunities for profitable employment. Chief of the Women's Bureau is Frieda S. Miller, with offices in the Department of Labor Building, Washington, D. C.

6. Children's Bureau: To promote the health, educational opportunity, and welfare of children through studies and reports, consultation service and principally by administration of the child labor provisions of the Fair Labor Standards Act. The chief of the Children's Bureau is Catherine Lenroot, with offices in the Department of Labor Building, Washington, D. C.

National Labor Relations Board—Principal office—Rochambeau Building, 815 Connecticut Avenue, N. W., Washington, D. C. Board consists of Paul M. Herzog, Chairman, John M. Houston, and James J. Reynolds, Jr. The Board maintains 22 Regional Offices.

National Wage Stabilization Board—A tripartite board consisting of employer, labor, and public members, whose function is to prevent inflationary increases in wages. This control is exercised only indirectly without Board approval an employer is barred from using wage increases in an application to OPA as a basis for an increase in the price ceiling. Pay reductions remain illegal under the Wage Stabilization Act unless WSB approval is obtained. Penalties for violation of WSB regulations include disallowance of all illegal wages for tax deduction purposes, thus subjecting employers to heavy financial losses. The Board operates through 12 Regional Offices, with its main office in the Labor Department Building, Constitution Avenue and 14th St., N. W., Washington, D. C. Chairman of the Board is W. Willard Wirtz. Stabilization of salaries is enforced by the Salary Stabilization Unit of the United States Treasury, located in the Bureau of Internal Revenue Building, 12th St. and Constitution Ave., N. W., Washington, D. C. The SSU maintains 14 District Offices with Wilbur A. Gallahan at its head.

National Mediation Board—Composed of three members appointed by the President, not more than two of whom may belong to the same political party. The Board investigates disputes over representation and mediates disputes concerning changes in rates of pay, rules or working conditions of

employees subject to the Railway Labor Act. The Board maintains its principal offices in the Federal Works Building, 18th and F Streets, N. W., Washington, D. C. The Board is composed of Harry H. Schwartz, George M. Cook, and Frank P. Ruglass. (See *Labor Legislation*.)

National Railroad Adjustment Board—Settles grievances and disputes arising out of interpretation of agreements concerning pay, rules or working conditions.

The Chairman of this Board is C. E. Peck and the vice chairman is H. J. Carr.

Collective Bargaining and Union Recognition

Approximately 29 million workers were engaged in occupations in which unions are organizing and obtaining written agreements in 1945. Of these, approximately 14 million workers, or almost 48 percent of those employed in private industry, were covered by union contracts. Although the total number decreased somewhat from 1944, the ratio of those covered by collective bargaining to the total number employed increased slightly from 47 percent to about 48 percent.

In manufacturing industries, slightly over 67 percent (8 millions) of the produc-

tion wage earners were employed under union agreements during 1945 compared with 65 percent in 1944. In nonmanufacturing industries the workers covered by union agreements in 1945 constituted about 34 percent (5.8 millions) compared with about 33 percent in 1944. The types of union recognition granted included closed shop, union shop with or without preferential hiring of union members, maintenance of membership, preferential hiring with no membership requirements, and sole bargaining with no membership requirements.

Membership of Leading American Labor Unions

Name of union	Affiliation	Date	Number of members
Amalgamated Clothing Workers.....	CIO	1946	300,000
Amalgamated Meat Cutters and Butcher Workmen.....	AFL	1946	168,311
American Federation of Musicians.....	AFL	1946	151,000
Bakery and Confectionery Workers' International Union.....	AFL	1946	150,800 gross
Brotherhood of Locomotive Firemen and Enginemen.....	Ind.	1946	116,732
Brotherhood of Maintenance of Way Employees.....	AFL	1944	117,000
Brotherhood of Painters, Decorators and Paperhangers.....	AFL	1946	181,380
Brotherhood of Railroad Trainmen.....	Ind.	1946	215,872
Brotherhood of Railway and Steamship Clerks.....	AFL	1946	301,997
Building Service Employees' International Union.....	AFL	1946	133,000
Hotel and Restaurant Employees' International Alliance.....	AFL	1946	354,731
Industrial Union of Marine and Shipbuilding Workers.....	CIO	1946	200,000 represented ¹
International Association of Machinists.....	Ind.	1945	625,000
International Brotherhood of Boilermakers.....	AFL	1944	337,000
International Brotherhood of Electrical Workers.....	AFL	1946	336,854
International Brotherhood of Teamsters.....	AFL	1944	629,000
International Hod Carriers', Building and Common Laborers' Union.....	AFL	1944	333,000
International Ladies' Garment Workers' Union.....	AFL	1946	325,000 in good standing ²
International Union of Mine, Mill and Smelter Workers.....	CIO	1946	125,000 in good standing ³
National Federation of Telephone Workers.....	Ind.	1946	204,000
Retail, Wholesale and Department Store Union.....	CIO	1946	125,000
Textile Workers Union.....	CIO	1946	400,000 represented
United Association of Plumbers and Steam Fitters.....	AFL	1946	201,000
United Automobile, Aircraft and Agricultural Implement Workers.....	CIO	1945	891,840 ⁴
United Brotherhood of Carpenters and Joiners.....	AFL	1945	722,000 gross ⁵
United Electrical, Radio and Machine Workers.....	CIO	1945	700,000 represented
United Mine Workers.....	AFL	1946	600,000 in good standing ⁶
United Rubber, Cork, Linoleum and Plastic Workers.....	CIO	1946	195,000 in good standing ⁷
United Steelworkers.....	CIO	1946	725,308 ⁸

¹Subject to decline in shipbuilding industry.

²Members do not lose good standing till they are nine months in arrears in dues.

³Includes members exonerated from dues: on strike, on sick leave, in armed services.

⁴Average for 1945. Membership lower at end of 1945.

⁵All active members.

⁶Includes members exonerated from dues.

⁷Includes 4-5,000 who were out of work because of illness, etc.

⁸Excludes 61,200 exonerated members and 66,900 in armed forces.

Proportion of Wage Earners Under Union Agreements in January 1946

Source: U. S. Bureau of Labor Statistics.

MANUFACTURING INDUSTRIES

80-100 percent	60-80 percent	40-60 percent	20-40 percent	1-20 percent
Agricultural equipment	Book and job printing	Baking	Beverages, nonalcoholic	Dairy products
Aircraft and parts	and publishing	Canning and preserving foods	Chemicals, excluding rayon yarn	
Aluminum	Coal products	Dyeing and finishing textiles	Confectionery products	
Automobiles and parts	Electrical machinery, equipment, and appliances	Flour and other grain products	Cotton textiles	
Breweries	Machinery and machine tools	Furniture	Paper products	
Carpets and rugs, wool	Millinery and hats	Gloves, leather and cloth	Silk and rayon textiles	
Cement	Paper and pulp	Hosiery		
Clocks and watches	Petroleum refining	Jewelry and silverware		
Clothing, men's	Railroad equipment	Knit goods		
Clothing, women's	Rayon yarn	Leather luggage, handbags, novelties		
Furs and fur garments	Steel products	Lumber		
Glass and glassware	Tobacco products	Pottery, including chinaware		
Leather tanning	Woolen and worsted textiles	Shoes, cut stock and findings		
Meat packing		Stone and clay products		
Newspaper pbg. and pub. products				
Nonferrous metals and products				
Rubber products				
Shipbuilding				
Steel, basic				
Sugar, beet and cane				

NONMANUFACTURING INDUSTRIES

80-100 percent	60-80 percent	40-60 percent	20-40 percent	1-20 percent
Actors and musicians	Radio technicians	Bus lines, intercity	Barber shops	Agriculture
Airline pilots and mech.	Theater—stage hands, motion-picture operators	Light and power	Building servicing and maintenance	Beauty shops
Bus and street car, local		Newspaper offices	Cleaning and dyeing	Clerical and professional, excluding transportation communication theaters, and newspapers
Coal mining		Telephone service and maintenance	Crude petroleum and natural gas	Retail and wholesale trade
Construction			Fishing	
Longshoring			Hotels and restaurants	
Maritime			Laundries	
Metal mining			Nonmetallic mining and quarrying	
Motion-picture prod. R.R.s.—freight and passenger, shops and clerical			Taxicabs	
Telegraph service and maintenance				
Trucking, local and inter-city				

Trend in Union Recognition in the United States

Source: U. S. Bureau of Labor Statistics.

	1941	1942	1943	1944	1945
Eligible for union-agreement coverage:					
Number (in millions)	31	31	31	30 $\frac{1}{4}$	29
Percent under agreement	30	40	45	47	48

PERCENTAGE DISTRIBUTION

Unionized workers under agreements providing for:					
Closed shop	} 40	} 45	30	28	30
Union shop			20	18	15
Maintenance of membership			15	27	29
Preferential hiring			5	2	3
Other			35	25	23
Total			100	100	100

Labor Organizations

THE AMERICAN FEDERATION OF LABOR

The American Federation of Labor was founded in 1881 as the Federation of Organized Trades and Labor Unions of the United States and Canada, changing its name in 1886. Its basic approach was to organize workers by crafts and skills, rather than by geographical area as was the practice of the Knights of Labor which the AFL was successful in replacing. The present organizational structure is practically identical with that set up under the leadership of Samuel Gompers, president of the Cigar Makers International Union. The AFL is financed by per capita dues from each of the affiliated international unions which are autonomous, self-governing bodies. The Federation, however, has authority to fix the jurisdiction of its affiliated internationals, though it is not always able to enforce decisions. Federation officers are elected by annual conventions. The governing body between conventions is the Executive Council, elected by the convention. The AFL now consists of a little more than 100 international unions, claiming a membership of approximately 7,400,000. Its principal activities are to aid constituent unions in organizing and bargaining, to promote or oppose legislation, litigate test cases in court, watch interpretation and enforcement of laws, represent its affiliates in tripartite government agencies, and act for its membership in international bodies. It also operates through city and state federations, and through councils or

departments of allied crafts. The AFL has refrained from tying itself up too closely with any political party or government administration. Most constituent AFL unions are craft unions although a number are industrial. By extension into a number of industries some of the original craft unions have become mixed unions. The Brotherhood of Painters, Decorators, and Paper Hangers of America, AFL, is an illustration of a craft union whose jurisdiction includes building construction and maintenance work in establishments in many industries. The address of the American Federation of Labor is 901 Massachusetts Ave., N. W., Washington, D. C.

OFFICERS COUNCIL OF AFL—1946

William Green	President
W. L. Hutcheson	First Vice President
Matthew Woll	Second Vice President
Joseph N. Weber	Third Vice President
G. M. Bugniazet	Fourth Vice President
Geo. M. Harrison	Fifth Vice President
Daniel J. Tobin	Sixth Vice President
Harry C. Bates	Seventh Vice President
W. D. Mahon	Eighth Vice President
Felix H. Knight	Ninth Vice President
W. C. Birthright	Tenth Vice President
W. C. Doherty	Eleventh Vice President
David Dubinsky	Twelfth Vice President
John L. Lewis	Thirteenth Vice President
Martin Durkin	Secretary-Treasurer

CONGRESS OF INDUSTRIAL ORGANIZATIONS

The Congress of Industrial Organizations resulted from a split in the American Federation of Labor. In order to organize the mass production industries, leaders of the industrial unions within the AFL won approval at the Federation's San Francisco convention in 1934 of a resolution endorsing industrial unionism in the automobile, cement, aluminum, and other mass-

production industries. Failure of the AFL to organize the mass-production industries finally brought on a crisis at the 1935 convention at Atlantic City. Less than a month after this convention closed, led by John L. Lewis, Sidney Hillman, and David Dubinsky, the United Mine Workers, the Amalgamated Clothing Workers, the International Ladies Garment Workers

Union, the United Textile Workers, the Oil Field, Gas and Refinery Workers, the International Union of Mine, Mill, and Smelter Workers founded the Committee for Industrial Organization. Other industrial unions shortly joined the Committee. In January, 1936, the Executive Council of the AFL ordered the CIO to dissolve and in August, upon its refusal to do so, suspended the ten unions. Disagreement on the desirability of reunification of labor led the ILGWU to return to the AFL, with John L. Lewis' UMW following suit later.

At present the Congress of Industrial Organizations includes more than 40 international unions with a claimed membership of 6,500,000. The CIO has emphasized legislation as an aid to organization and collective bargaining drives. It has also formed a Political Action Committee whose chief purpose is to give systematic political support to candidates seeking public office whom it regards as pro-labor.

The CIO is financed by per capita dues from each of the affiliated international unions which are autonomous, self-governing bodies, as in the AFL. Unlike the AFL, however, the parent organization has greater influence over the decisions of the individual unions. The CIO is governed by a General Executive Board, consisting of a representative from each of the international unions. A smaller body of officers is elected by the annual convention. CIO headquarters are located at 718 Jackson Place, Washington 6, D. C.

OFFICERS OF CIO—1946

Philip Murray	President
R. J. Thomas	Vice President
Walter P. Reuther	Vice President
L. S. Buckmaster	Vice President
Joseph Curran	Vice President
Albert J. Fitzgerald	Vice President
John Green	Vice President
Allan S. Haywood	Vice President
Emil Rieve	Vice President
Frank Rosenblum	Vice President
James B. Carey	Secretary-Treasurer

INDEPENDENT UNIONS—It is generally estimated that 2,000,000 workers are organized in independent unions, many of them operating only as company- or plant-wide unions. Some are loosely united in the Confederated Unions of America, whose central headquarters are located at 809 "I" Street, N. W., Washington, D. C. The most important of the independents, however, are organized much like the international unions of the AFL and CIO, some of them having withdrawn from the AFL.

1. **Railroad Brotherhoods.** The most prominent of the railroad unions are the four independent train service unions, commonly referred to as the "Brotherhoods." Labor organization in the railroads is predominantly along craft or occupational lines. The "Big Four" unaffiliated

unions represent craft elements in the industry. They include the Brotherhood of Locomotive Firemen and Enginemen, Brotherhood of Railroad Trainmen, Grand International Brotherhood of Locomotive Engineers, and the Order of Railway Conductors of America. Membership figures for the "Big Four" unaffiliated unions are as follows: Railway Conductors—36,360; Locomotive Firemen and Enginemen—11,732; Railroad Trainmen—215,872; Locomotive Engineers—76,589. All told, however, there are about 1,400,000 employees on Class 1 railroads and some 23 so-called standard railroad unions. All except about 70,000 employees are covered by union agreements, so that approximately 95 per cent were employed under contracts.

The railroad unions, except for the Railroad Trainmen and the Locomotive Engineers, attempt some form of united action through the Railway Labor Executive Assn., which includes some AFL unions.

2. **International Association of Machinists.** The International Association of Machinists, claiming a membership of 625,000, was formerly affiliated with the American Federation of Labor. After one withdrawal it was readmitted into the AFL during the 1944 convention, but withdrew again in 1946 as a result of a jurisdictional dispute with the Brotherhood of Carpenters and the Sheet Metal Workers International Association. IAM Hqt. are at 9th St. and M Vernon Pl., N. W., Washington, D. C.

3. **Foreman's Association of America.** Union membership of foremen received its impetus in the mass production industries. The organization of supervisors became an active issue after the effective organization of production workers by the newly organized industrial unions. In 1941, foremen from numerous Detroit automobile plants organized an independent union, the Foreman's Association of America, which later expanded its membership into other industries and areas. FAA obtained a contract from the Ford Motor Company in 1943 but met with resistance from other auto manufacturers. Organizational activities were aided by the decision of the National Labor Relations Board in 1944 holding that foremen were entitled to bargain collectively under the Wagner Act. FAA claims a membership of 28,000 in 28 locals. Its headquarters are located at 51 Barlum Tower, Detroit, Michigan.

4. **National Federation of Telephone Workers.** Telephone workers, organized in local independent unions, formed the National Federation of Telephone Workers in 1939, now claiming about 150,000 members. The Federation in 1946 examined the question of affiliation with the AFL or CIO and though it received a better offer from the latter, it nevertheless decided to remain independent. Its national headquarters are at 306 North Charles St., Baltimore, Md.

THE FEDERAL TAX SYSTEM

The Internal Revenue Code is the basic tax law of the Federal Government. Although it provides for many types of taxes such as gift, estate, manufacturers' excise, document, etc., its chief feature is the income tax, both individual and corporate.

Individual Taxes

Individual tax rates for the calendar year 1946 are: normal tax at 3 percent, and surtax scaled from 17 percent to 88 percent in accordance with the following table:

Surtax net income		Surtax rates	
Not over \$2,000	17% of the surtax net income		
Over \$2,000 but not over \$4,000	\$340 + 19% of excess over \$2,000		
Over 4,000 " " " 6,000	720 + 23% " " " 4,000		
Over 6,000 " " " 8,000	1,180 + 27% " " " 6,000		
Over 8,000 " " " 10,000	1,720 + 31% " " " 8,000		
Over 10,000 " " " 12,000	2,340 + 35% " " " 10,000		
Over 12,000 " " " 14,000	3,040 + 40% " " " 12,000		
Over 14,000 " " " 16,000	3,840 + 44% " " " 14,000		
Over 16,000 " " " 18,000	4,720 + 47% " " " 16,000		
Over 18,000 " " " 20,000	5,660 + 50% " " " 18,000		
Over 20,000 " " " 22,000	6,660 + 53% " " " 20,000		
Over 22,000 " " " 26,000	7,720 + 56% " " " 22,000		
Over 26,000 " " " 32,000	9,960 + 59% " " " 26,000		
Over 32,000 " " " 38,000	13,500 + 62% " " " 32,000		
Over 38,000 " " " 44,000	17,220 + 66% " " " 38,000		
Over 44,000 " " " 50,000	21,180 + 69% " " " 44,000		
Over 50,000 " " " 60,000	25,320 + 72% " " " 50,000		
Over 60,000 " " " 70,000	32,520 + 75% " " " 60,000		
Over 70,000 " " " 80,000	40,020 + 78% " " " 70,000		
Over 80,000 " " " 90,000	47,820 + 81% " " " 80,000		
Over 90,000 " " " 100,000	55,920 + 84% " " " 90,000		
Over 100,000 " " " 150,000	64,320 + 86% " " " 100,000		
Over 150,000 " " " 200,000	107,320 + 87% " " " 150,000		
Over 200,000	150,820 + 88% " " " 200,000		

The total of normal tax and surtax is reduced by 5 percent to give the actual tax due. For example, if the normal tax and surtax equal \$100, the taxpayer will pay \$95 less 5 percent, or \$95, not \$100.

(No individual need pay a total tax greater than 85.5 percent of his net income.)

Deductions:

In computing taxable net income, the taxpayer has the choice of using either the actual deductions incurred by him, such as: interest, taxes, contributions, etc., or the optional standard deduction. The optional deduction is used in place of actual deductions and amounts to roughly 10 percent of the taxpayer's income after business and employment expenses have been deducted. However, it may never exceed \$500.

Exemptions:

The same exemptions are allowed in calculating both the normal tax and the surtax. The taxpayer is entitled to a \$500 exemption for himself and each of his dependents. To claim someone as a dependent you must furnish over half the money for his support, his taxable income

must be less than \$500, and he must be closely related to you. These are considered "close" relatives:

Son and daughter (including an adopted child), grandchild, great-grandchild, etc.

Stepchild

Son-in-law and daughter-in-law

Parents, grandparents, etc.

Stepfather and stepmother

Father-in-law and mother-in-law

Brother, sister, half-brother, half-sister

Brother-in-law and sister-in-law

Uncle, aunt, nephew and niece (but not if related to you only by marriage)

The taxpayer's wife is entitled to a \$500 exemption for normal tax and for surtax, whether on a separate or a joint return. But the husband may claim his wife's \$500 exemption on his separate return if she has no income and is not claimed as a dependent by another taxpayer.

How income tax is collected:

To keep the collection of individual taxes on a current basis, two devices are used: (1) the withholding tax and (2) the declaration and payment of estimated tax. Withholding simply makes employers agents of the government in collecting taxes from employees. Through the use

of withholding tables, the tax on an employee's salary is roughly calculated. A proportionate amount of the tax is then deducted from each payment of salary to the employee. If at the end of the year, it appears that too much has been withheld, the employee gets a tax refund; if not enough has been withheld, the employee sends in the difference with his tax return.

Since the wage withholding method doesn't place on a current basis taxpayers receiving dividends, interest, profits from business, etc., and wage earners whose tax will exceed the amount withheld on wages, these taxpayers file a declaration at the beginning of the year estimating their current year's taxes and pay it in quarterly installments. Just as in the case of withholding, any overpayment or underpayment of tax is adjusted in the return covering the entire year.

Who must file a return:

If you've earned \$500 or more during the year you must file a return. This is required whether you're single, married, divorced, widowed or under 21. Also, if you earned less than \$500 but received other income from interest, dividends, rents, pensions, etc., which brings your income up to \$500, a return is required.

Members of the armed services below the rank of commissioned warrant officer do not include any of their military or naval pay in deciding whether to fill out a return. Officers exclude the first \$1,500 of service pay in deciding if they file.

What form to use:

FORM W-2. There are two possible forms—1040 or W-2. Form W-2 is the familiar withholding receipt. Any taxpayer may choose to use Form 1040, but only a taxpayer who meets certain requirements is eligible to use Form W-2. These requirements are as follows:

1. His total income must be less than \$5,000.
2. His income must be derived entirely from wages, dividends, or interest.
3. His income from sources other than wages subject to withholding must not exceed \$100.
4. His return must not be made for a fractional part of a year because of a change in accounting method.
5. He cannot be a nonresident alien.
6. He cannot claim special tax treatment because his income is mainly derived from sources within United States possessions.

If a husband and wife file a combined return on the withholding receipt, the combined income must meet the first three tests. If a wife files a separate withholding receipt, the husband must either use his

receipt as a return, use the tax table method of figuring the tax on the regular form, or use the optional standard deduction if his income is over \$5,000.

Taxpayers who are eligible to use Form W-2 need answer only a few simple questions appearing on it, and let the collector compute the actual amount of tax liability. This computation will be on the basis of the tax table which is part of Form 1040, and which automatically allows the standard deduction of approximately 10 percent. If any additional tax is due, the collector will send the taxpayer a bill for that amount. This bill must be paid within thirty days after it has been mailed by the collector. If the amount of taxes withheld from wages plus any amount paid as an estimated tax exceed the total tax due, then a refund will be sent.

If the taxpayer has received more than one receipt for income tax withheld during the year (either the old or the revised Form W-2), he must use the last one received as his return, and must attach the others to it. If a husband and wife file a combined return on Form W-2, all receipts which were given to both of them must be attached. If any receipt is missing and the taxpayer cannot obtain a duplicate from his employer, he must file a return on Form 1040.

FORM 1040. Every individual who does not meet *all* the requirements for using Form W-2, or who wants to make his own computations, must use Form 1040. If his adjusted gross income is less than \$5,000 (regardless of source), and if he meets requirements (4), (5), and (6) listed under Form W-2 (above), he may convert the form into a "short" form by tearing off pages 3 and 4, filing only pages 1 and 2. If he does so, he must use the tax table method of computing his tax liability.

Partnerships:

A partnership as such does not pay tax. Instead the individual partners pick up their share of the partnership net profit or loss and report it in their individual returns.

Estates and trusts:

Every fiduciary (except a receiver who is in possession of only part of an individual's property), or one or two or more joint fiduciaries must file a return for the following individuals, estates and trusts for which he acts:

- (a) Every individual whose gross income for the taxable year is \$500 or more;
- (b) Every estate which has a gross income of \$500 or more;
- (c) Every trust which has a *net* income of \$100 or more, or which has a *gross* income of \$500 or more;
- (d) Every estate or trust of which a beneficiary is a nonresident alien.

Corporation Taxes

Corporations are now subject to the following tax rates:

Earnings up to \$25,000

Normal tax	
First \$5,000	15%
Next 15,000	17%
Next 5,000	19%
Surtax	6%

Earnings between \$25,000 and \$50,000

Normal tax	\$4,250 plus 31% of normal tax net income over \$25,000
Surtax	\$1,500 plus 22% of surtax net income over \$25,000

Earnings over \$50,000

Normal tax	24%
Surtax	14%

There is no longer an excess profits tax, capital stock tax or declared value excess

profits tax. However, the 27½ percent-38½ percent penalty surtax on corporations which unreasonably accumulate earnings to avoid the surtax on individual stockholders is still in effect.

Gift Tax

Individuals who make gifts are subject to a gift tax based on the value of the property given. However, exemption is provided for a certain amount of gifts and the tax does not apply until the exemption is exceeded. The exemptions work this way:

During his lifetime, an individual may give away \$30,000 taxfree. In addition, the first \$3,000 of gifts made by him to each person in any one year is also exempt. For example, a taxpayer may give his wife and child \$3,000 apiece each year without incurring gift tax and without using up any of his \$30,000 lifetime exemption.

After deducting exemptions, the value of gifts is taxed at the following rates:

(A)	(B)	(C)	(D)
Amount of net gifts equaling—	Amount of net gifts not exceeding—	Tax on amount in column (A)	Rate of tax on excess over amount in column (A) Percent
.....	\$ 5,000	.....	2¼
\$ 5,000	10,000	\$ 112.50	5¼
10,000	20,000	375.00	8¼
20,000	30,000	1,200.00	10½
30,000	40,000	2,250.00	13½
40,000	50,000	3,600.00	16½
50,000	60,000	5,250.00	18¾
60,000	100,000	7,125.00	21
100,000	250,000	15,525.00	22½
250,000	500,000	49,275.00	24
500,000	750,000	109,275.00	26¼
750,000	1,000,000	174,900.00	27¾
1,000,000	1,250,000	244,275.00	29¼
1,250,000	1,500,000	317,400.00	31½
1,500,000	2,000,000	396,150.00	33¾
2,000,000	2,500,000	564,900.00	36¾
2,500,000	3,000,000	748,650.00	39¾
3,000,000	3,500,000	947,400.00	42
3,500,000	4,000,000	1,157,400.00	44¼
4,000,000	5,000,000	1,378,650.00	47¼
5,000,000	6,000,000	1,851,150.00	50¼
6,000,000	7,000,000	2,353,650.00	52½
7,000,000	8,000,000	2,878,650.00	54¾
8,000,000	10,000,000	3,426,150.00	57
10,000,000	.....	4,566,150.00	57¾

A gift tax return (Form 708) and payment of the tax are due on March 15th following the close of the calendar year in which the taxable gifts are made.

Integration of Gift and Estate Taxes

The gift tax was originally intended to complement and reinforce the estate tax. The idea was to place a tax on the transfers of property made during a taxpayer's lifetime, thereby counterbalancing the lower estate taxes to be collected from the smaller estate which would be left at the taxpayer's death. The Treasury feels that the gift tax has failed to accomplish this

purpose, largely because gift and estate taxes are applied as separate taxes. This permits the making of well-timed transfers of property which can substantially avoid both gift and estate taxes. The Treasury is seriously considering the complete integration of gift and estate taxes into a single tax with each gift during life being considered as part of the taxpayer's estate.

Estate Tax

The estate is based on the net value of an individual's property which is transferred to others as a result of his death. The calculation of the actual estate tax due is somewhat complicated by the necessity of figuring two separate taxes.

The net tax payable is: (1) the estate tax, consisting of (a) the gross tax computed under Schedule I less (b) the credits allowable against such tax, plus (2) the additional estate tax, consisting of (a) the tentative tax computed under Schedule II less (b) the credits allowable against such tentative tax:

(1) *The estate tax* (1926 Act as amended—specific exemption of \$100,000 in determining net estate).

(a) Schedule I:

	Percent
First \$50,000 of net estate	1
<i>In excess of</i>	
\$50,000 up to \$100,000	2
100,000 " " 200,000	3
200,000 " " 400,000	4
400,000 " " 600,000	5
600,000 " " 800,000	6
800,000 " " 1,000,000	7
1,000,000 " " 1,500,000	8
1,500,000 " " 2,000,000	9
2,000,000 " " 2,500,000	10
2,500,000 " " 3,000,000	11
3,000,000 " " 3,500,000	12
3,500,000 " " 4,000,000	13
4,000,000 " " 5,000,000	14
5,000,000 " " 6,000,000	15
6,000,000 " " 7,000,000	16
7,000,000 " " 8,000,000	17
8,000,000 " " 9,000,000	18
9,000,000 " " 10,000,000	19
10,000,000	20

(b) Credits:

(1) The amount of gift taxes paid under the Gift Tax Act of 1932 on gifts by the decedent which must be included in his gross estate, not in excess of the proportion of the gross tax computed under the above schedule which the value of the gift property bears to the value of the gross estate.

(2) The entire amount of gift taxes paid under the Revenue Act of 1924 on gifts by the decedent which must be included in his gross estate.

(3) The amount of succession taxes paid to any state or territory in respect to property included in the gross estate, not exceeding 80 percent of the tax computed under Schedule I before deducting credits Nos. 1 and 2.

(2) *The additional estate tax* (1932 Act as amended—specific exemption of \$60,000 in determining net estate).

(a) Schedule II:

		Tax on lower amount	Percent on excess
First \$5,000			3
	Net estate		
\$5,000 to \$10,000		\$150	7
10,000 " 20,000		500	11
20,000 " 30,000		1,600	14
30,000 " 40,000		3,000	18
40,000 " 50,000		4,800	22
50,000 " 60,000		7,000	25
60,000 " 100,000		9,500	28
100,000 " 250,000		20,700	30
250,000 " 500,000		65,700	32
500,000 " 750,000		145,700	35
750,000 " 1,000,000		233,200	37
1,000,000 " 1,250,000		325,700	39
1,250,000 " 1,500,000		423,200	42
1,500,000 " 2,000,000		528,200	45
2,000,000 " 2,500,000		753,200	49
2,500,000 " 3,000,000		998,200	53
3,000,000 " 3,500,000		1,263,200	56
3,500,000 " 4,000,000		1,543,200	59
4,000,000 " 5,000,000		1,838,200	63
5,000,000 " 6,000,000		2,468,200	67
6,000,000 " 7,000,000		3,138,200	70
7,000,000 " 8,000,000		3,838,200	73
8,000,000 " 10,000,000		4,568,200	76
10,000,000 " and over		6,088,200	77

(b) Credits:

(1) The gross tax under Schedule I.

(2) The amount of gift taxes paid under the Gift Tax Act of 1932 on gifts by the decedent which must be included in his gross estate, not credited against the estate tax under Schedule I and not in excess of the proportion of the tentative tax under Schedule II less the gross tax under Schedule I which the value of the gift property bears to the gross estate.

If the gross estate of decedent dying after October 21, 1942, exceeds \$60,000 (insurance included), the legal representative is required to file notice within 2 months after qualification and to file a return within 15 months after decedent's death. Tax is due within 15 months after decedent's death on Form 706. Tax is to be paid by the legal representative out of estate funds. Taxes unpaid after 15 months from the date of death draw interest at 6 percent per annum, except that where an extension of time for payment is granted after March 31, 1938, interest begins to run 18 months after the date of death at 4 percent.

Excise Taxes

Manufacturers' excise taxes based upon the amount of sales made by a manufacturer are levied at the following rates:

Automobile truck chassis and bodies	5%
Passenger automobile chassis and bodies, including motorcycles	7%
Parts and accessories	5%
Firearms, shells and cartridges	11%
Gasoline, per gallon	1½¢

Excise Taxes—(cont.)

Tires, per lb.	5¢
Inner tubes, per lb.	9¢
Lubricating oils, per gallon	6¢
Matches	
fancy wooden, per 1,000	5½¢
ordinary, per 1,000	2¢
Mechanical refrigerators	10%
Pistols and revolvers	11%
Radio receiving sets and parts	10%
Sporting goods	10%
Electric, gas, and oil appliances	10%
Photographic apparatus	25%
Unexposed photographic films, plates and paper	15%
Business and store machines	10%
Electric light bulbs	20%

Retailers' excise taxes based on sales by retailers are levied as follows:

Jewelry	20%
Furs	20%
Toilet preparations	20%
Luggage, etc.	20%

Stamp taxes on original issue and transfer of securities are as follows:

Bonds	
issue, per \$100 face value or fraction	\$.11
transfer, per \$100 face value or fraction ....	.05
Stocks	
issue	
par value, per \$100 or fraction ..	.11
no par value, per \$20 of actual value or fraction where less than \$100 per share ....	.03
no par value, per \$100 of actual value or fraction where more than \$100 per share ....	.11
transfer	
par value, per \$100 aggregate face value or fraction:	
selling price less than \$20 a share ....	.05
selling price more than \$20 a share ....	.06
no par value, per share:	
selling price less than \$20 a share ....	.05
selling price more than \$20 a share ....	.06

Admissions and dues are taxed on the basis of the admissions and the dues paid:

Admissions	
per \$.05 or major fraction	\$.01
charges in excess of established price	
by other than ticket offices, on excess	20%
by proprietors and employees, on excess	50%
lease of boxes or seats, on equivalent box office price	20%
cabarets, roof gardens and similar entertainment	20%

Dues

annual dues in excess of \$10	20%
initiation fees over \$10	20%
Telephone, telegraph, radio and cable facilities are taxed on the amount of charge for the services:	
Telephone conversations	
\$.25 and over	25%
A 15% tax is levied upon amount paid by subscribers for local telephone service and for toll charges of less than 25 cents.	
Telegraph messages	25%
Radio and cable messages	25%
Leased wire or special services	25%
International dispatches and messages	10%
Wire and equipment services	8%

Leases of safe deposit boxes are taxed on the basis of the amount paid for use of the box:

On lease price	20%
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Tobacco taxes are as follows:

Cigars:	
weighing not over 3 lbs. per M ..	\$.75
weighing over 3 lbs. per M	
if retail price 2½¢ or less	2.50
if retail price over 2½¢ up to 4¢	3.00
if retail price over 4¢ up to 6¢	4.00
if retail price over 6¢ up to 8¢	7.00
if retail price over 8¢ up to 15¢	10.00
if retail price over 15¢ up to 20¢	15.00
if retail price over 20¢	20.00

Cigarettes	
weighing not over 3 lbs. per M ..	3.50
weighing over 3 lbs. per M	8.40
Tobacco and snuff	
per pound ....	.18
Cigarette paper	
package, book, or set of more than 25 and less than 50, per package ....	.005
package, book, or set of more than 50 and not more than 100, per package ....	.01
package, book, or set of more than 100 papers, per 50 papers	.005
in tubes, per 50 tubes or fraction	.01

Liquor taxes are as follows:

Distilled spirits, per proof gallon ...	\$9.00
Imported perfumes containing distilled spirits	9.00
Rectified spirits, additional tax on each proof gallon ....	.30
Still wines	
up to 14% alcohol per gallon ....	.15
over 14% up to 21% per gallon ....	.60
over 21% up to 24% per gallon ...	2.00
over 24% alcohol	9.00
Artificially carbonated wine, per half-pint ....	.10
Liqueurs, cordials and similar compounds, per half-pint ....	.10
Champagne and sparkling wine, per half-pint ....	.15
Fermented liquors, per barrel	8.00

Transportation taxes are levied on fares over 35 cents at the rate of 15 percent.

Outline of State Taxes

ALABAMA

Income Tax (Individual)

1½% up to \$1,000	4½% next	\$2,000
3% next	5% over	\$5,000

Income Tax (Corporation) 3%

Other Taxes Corporations

Franchise tax; organization and qualification fees; corporation permit fee; special insurance company taxes; special taxes on public utilities.

Individuals

Estate and inheritance taxes.

Alcoholic Beverages

Excise tax; license fee.

Motor Vehicles

Registration tax; license fees on commercial vehicles; mileage tax on motor carriers; gasoline and motor fuel tax; lubricating oil.

General

Property taxes (real and personal); corporate share tax; sales tax; poll tax; coal and iron ore mining tax; oil and gas conservation tax; tobacco tax; securities tax; use tax; occupational licenses; chain store tax; deed and mortgage recording tax; carbonic acid gas tax; forest products tax.

ARIZONA

Income Tax (Individual)

1% up to \$2,000	2½% next	\$1,000
1¼% next	3% "	\$1,000
1½% "	3½% "	\$1,000
2% "	4% "	\$1,000
4½% over \$9,000		

Income Tax (Corporation)

1% up to \$1,000	3% next	\$1,000
2% next	3½% "	\$1,000
2½% "	4½% "	\$1,000
5% over \$6,000		

Other Taxes Corporations

Organization and qualification fees; corporation registration fees; insurance company license tax; public utility special taxes.

Individuals

Estate tax; poll tax.

Motor Vehicles

Gasoline tax; use fuel tax; motor vehicle carrier's tax; registration fees; drivers' licenses.

General

Alcoholic beverage licenses; property tax; occupational gross income tax; luxuries excise tax; occupation licenses.

ARKANSAS

Income Tax (Individual)

1% up to \$3,000	3% next	\$5,000
2% next	4% "	\$14,000
5% over \$25,000		

Income Tax (Corporation)

1% up to \$3,000	3% next	\$5,000
2% next	4% "	\$14,000
5% over \$25,000		

Other Taxes Corporations

Franchise tax; organization and qualification fees; domestic and foreign insurance company taxes; public utility company fees.

Alcoholic Beverages

Sales tax; excise tax; license fees.

Individuals

Estate tax; poll tax.

Motor Vehicles

Registration fees; drivers' licenses; manufacturer's license tax; gasoline tax; use fuel tax.

General

Property taxes (real and personal); excise tax on malt extracts; oleomargarine tax; severance tax; cigarette tax; gross receipts tax; oil and gas conservation tax.

CALIFORNIA

Income Tax (Individual)*

1% up to \$10,000	4% next	\$ 5,000
2% next	5% "	\$ 5,000
3% "	6% over	\$30,000

Income Tax (Corporation) 4%

Other Taxes Corporations

Bank and corporation franchise tax; organization and qualification fees; insurance company tax.

Alcoholic Beverages

Excise taxes; license fees.

Individuals

Estate tax; inheritance tax; gift tax.

Motor Vehicles

Gasoline tax; use fuel tax; gross receipts tax on motor carriers; registration fees; motor vehicle license tax; drivers' license.

General

Oil and gas severance tax; property tax; public utilities taxes; license and occupational taxes; sales tax; use tax; poll tax.

*Temporary rates applicable to taxable years beginning after December 31, 1942 and before January 1, 1947.

COLORADO

Income Tax (Individual)

1% up to \$2,000	4% next	\$2,000
2% next	5% "	\$2,000
3% "	6% over	\$10,000

Income Tax (Corporation) 4%

Other Taxes Corporations

Foreign corporation recording fee; franchise tax; insurance company tax on premiums; public utility tax.

Individuals

Inheritance tax; estate tax; unincorporated business tax; estate penalty tax; old age assistance tax.

Alcoholic Beverages

Distributors' tax; permit fees.

Motor Vehicles

Gasoline tax; use fuel tax; registration fees; motor carrier taxes; motor bus excise tax.

General

Permit fees; cigarette stamp tax; property taxes (real and personal); occupation license taxes; amusement taxes.

CONNECTICUT

Income Tax (Individual) None

Income Tax (Corporation) None

Other Taxes Corporations

Foreign corporation recording fee; franchise tax; insurance company tax on premiums; public utility tax.

Individuals

Inheritance tax; estate tax; unincorporated business tax; estate penalty tax; old age assistance tax.

Alcoholic Beverages

Distributors' tax; permit fees.

Motor Vehicles

Gasoline tax; use fuel tax; registration fees; motor carrier taxes; motor bus excise tax.

General

Permit fees; cigarette stamp tax; property taxes (real and personal); occupation license tax; amusement tax.

DELAWARE

Income Tax (Individual)

1% up to \$3,000 2% next \$7,000
3% over \$10,000

Income Tax (Corporation) None

Other Taxes Corporations

Organization and qualification fees; franchise taxes; bank-shares taxes; insurance company premium tax; public utilities special taxes.

Motor Vehicles

Gasoline tax; registration fees; drivers' licenses.

Individuals

Inheritance tax; estate tax; capitation tax.

Alcoholic Beverages

Excise taxes; license taxes.

General

License and occupation taxes; manufacturers' license tax; merchants' license tax; real property tax.

D. OF C.

Income Tax (Individual)

1% up to \$5,000 2% next \$5,000
1½% next \$5,000 2½% " \$5,000
3% over \$20,000

Income Tax (Corporation) 5%

Other Taxes Corporations

Public utility company tax; organization fees; insurance company tax; financial company tax.

Motor Vehicles

Gasoline tax; registration fees.

Alcoholic Beverages

Excise taxes; license taxes.

Individuals

Estate tax; inheritance tax.

General

License and occupation fees; property tax (real and personal).

FLORIDA

Income Tax (Individual) None

Income Tax (Corporation) None

Other Taxes Corporations

Annual filing fees; organization and qualification fees; bank license tax; insurance company license tax; public utility gross tax.

Individuals

Estate tax.

Motor Vehicles

Gasoline tax; use fuel tax; motor vehicle registration tax.

Alcoholic Beverages

Excise tax; license fees.

General

Chain store tax; real and personal property tax; intangibles tax; license taxes and inspection fees; documentary stamp tax; oleomargarine tax; cigarette tax; oil and gas taxes.

GEORGIA

Income Tax (Individual)

1% up to \$1,000 4% next \$2,000
2% next \$2,000 5% " \$3,000
3% " \$2,000 6% " \$10,000
7% over \$20,000

Income Tax (Corporation)

5½% (or an alternative tax based on income plus compensation, whichever is greater).

**Other Taxes
Corporations**

Annual license tax; organization and qualification fees; insurance company tax.

Individuals

Estate tax.

Motor Vehicles

Gasoline tax; motor carrier tax; registration fees; rolling store tax.

Alcoholic Beverages

Excise tax; license fees.

General

Chain and mail order store tax; license taxes and inspection fees; intangibles tax; property tax; tobacco tax; oleomargarine tax.

IDAHO**Income Tax (Individual)**

1½% up to \$1,000	5% next	\$1,000
3% next	\$1,000	6% " \$1,000
4% " \$1,000	8% over	\$5,000

Income Tax (Corporation)

1½% up to \$1,000	5% next	\$1,000
3% next	\$1,000	6% " \$1,000
4% " \$1,000	8% over	\$5,000

**Other Taxes
Corporations**

Organization fees; franchise tax; gross premium tax on insurance companies; public utility tax.

Individuals

Inheritance tax; poll tax.

Motor Vehicles

Gasoline tax; registration fees; transportation company tax.

Alcoholic Beverages

Stamp tax on sales; license tax.

General

Property taxes (real and personal); oleomargarine tax; chain tax; mine tax; license taxes and inspection fees; forest products yield tax; cigarette tax; malt extract tax.

ILLINOIS**Income Tax (Individual) None****Income Tax (Corporation) None****Other Taxes
Corporations**

Franchise tax; organization and qualification fees; foreign insurance companies; capital stock taxes; public utilities; gross receipts tax.

Individuals

Inheritance tax.

Motor Vehicles

Registration fees; mileage and weight tax; gasoline tax.

Alcoholic Beverages

Excise tax; license fees.

General

Bank share tax; license and occupation taxes; cigarette tax; property taxes (real and personal); retailers' occupational sales tax.

INDIANA**Income Tax (Individual) None****Income Tax (Corporation) None****Other Taxes
Corporations**

Organization and qualification fees; banks; insurance company; building and loan associations stock tax; insurance companies; gross income tax.

Motor Vehicles

Registration fees; gasoline tax; use fuel tax; motor carrier tax; motor vehicle weight tax.

Alcoholic Beverages

Excise tax; license fees.

General

Chain store tax; intangibles tax; license taxes and inspection fees; property tax (real and personal); tax on vessels.

IOWA**Income Tax (Individual)**

1% up to \$1,000	4% next	\$1,000
2% next	\$1,000	5% " \$1,000
3% " \$1,000	5% over	\$5,000

Income Tax (Corporation) 2%**Other Taxes
Corporations**

Annual filing fees; organization and qualification fees; public utilities special taxes; special insurance company taxes.

Individuals

Estate tax; inheritance tax.

Motor Vehicles

Registration tax; motor carrier tax; gasoline tax.

Alcoholic Beverages

Excise taxes; license fees.

General

Property tax (real and personal); money and credits tax; license taxes and inspection fees; oleomargarine tax; cigarette tax; chain store tax; sales tax; use tax.

KANSAS**Income Tax (Individual)**

1% up to \$2,000	2½% next	\$2,000
2% next	\$1,000	3% " \$2,000
	4% over	\$7,000

Income Tax (Corporation) 2%

Other Taxes Corporations

Organization and qualification fees; express company tax; car company tax; building and loan association tax; special insurance company tax; franchise tax.

Individuals

Estate tax; inheritance tax.

Motor Vehicles

Gasoline tax; use fuel tax; license tax; registration fees; motor carrier mileage tax.

General

Property tax (real and personal); malt beverage tax; cigarette stamp and license tax; oleomargarine or inspection tax; mortgage registration tax; sales tax; compensating tax; itinerant merchant tax; intangibles tax; license taxes and inspection fees; grain handling tax; oil and gas production tax.

KENTUCKY

Income Tax (Individual)

2% up to \$3,000	4% next	\$1,000
3% next	5% over	\$5,000

Income Tax (Corporation) 4%

Other Taxes Corporations

Organization and qualification fees; franchise taxes; bank share tax; bank deposit tax; insurance company special taxes; public utility special taxes; building and loan association capital stock taxes.

Individuals

Estate tax; inheritance tax; poll tax.

Motor Vehicles

Registration fees; motor carrier tax; gasoline tax.

Alcoholic Beverages

Excise taxes; license fees.

General

Admissions tax; chain store tax; cigarette tax; race track tax; indebtedness to brokers tax; business license taxes and inspection fees; oil production tax; property taxes (real and personal).

LOUISIANA

Income Tax (Individual)

2% up to \$10,000	4% next	\$40,000
6% over		\$50,000

Income Tax (Corporation) 4%

Other Taxes Corporations

Organization and qualification fees; franchise tax; insurance company gross receipts tax; public utilities tax; special tax on pipeline companies.

Individuals

Inheritance tax; estate tax.

Motor Vehicles

Gasoline tax; use fuel tax; lubricating oil tax; license tax; motor carrier tax.

General

Bank share tax; property taxes (real and personal); gift tax; severance tax; tax on cigars, cigarettes and smoking tobacco; chain store tax; kerosene tax; oleomargarine tax; soft drink tax; natural gas tax; occupational license taxes; sales and use tax.

MAINE

Income Tax (Individual) None

Income Tax (Corporation) None

Other Taxes Corporations

License fees; franchise tax; organization and qualification fees; insurance company premium tax; public utilities taxes; bank share tax; financial companies' franchise tax.

Individuals

Estate tax; inheritance tax; poll tax.

Motor Vehicles

Excise taxes; motor vehicles registration fees; gasoline tax; use fuel tax.

Alcoholic Beverages

Excise tax; license tax; consumer's tax.

General

Property taxes (real and personal); oleomargarine tax; cigarette tax; potato tax; license and occupation taxes; intangibles tax.

MARYLAND

Income Tax (Individual)

5% on investment income; 2% on other taxable net income.

Income Tax (Corporation) 1½ %

Other Taxes Corporations

Organization and qualification fees; franchise tax; bank shares tax; insurance company premium tax; public utility special taxes.

Individuals

Estate tax; inheritance tax.

Motor Vehicles

Gasoline tax; registration fees; excise tax on interstate busses.

Alcoholic Beverages

Excise tax; license tax.

General

Chain store tax; cosmetic tax; license taxes and inspection fees; property taxes (real and personal); admissions tax; docu-

ment recording stamp tax; savings bank tax; traders' license tax.

MASSACHUSETTS

Income Tax (Individual)

1½% to 6%, depending on nature of income. Total tax is increased by temporary surtax of 13% of normal tax.

Income Tax (Corporation) None

Other Taxes Corporations

Corporation excise tax; organization and qualification fees; annual certificates of condition; national bank and trust company tax measured by net income; savings banks and savings department of trust company taxes; insurance company net premium tax; public service corporation tax.

Individuals

Estate tax; poll tax (males); tax on legacies and successions.

Motor Vehicles

Gasoline tax; motor vehicle excise tax; motor vehicle registration fees.

Alcoholic Beverages

License tax; excise tax.

General

Cigarette tax; excise tax on meals; license taxes and inspection fees; property taxes; stock transfer tax; state racing commission taxes.

MICHIGAN

Income Tax (Individual) None

Income Tax (Corporation) None

Other Taxes Corporations

Organization and qualification fees; franchise tax; public service corporation tax; foreign insurance company tax.

Individuals

Estate tax; inheritance tax; poll tax.

Motor Vehicles

Motor vehicle carriers' fees; gasoline tax; registration fees.

General

Chain store taxes; sales and use tax; steamship tonnage tax; stumpage tax; severance tax; property taxes (real and personal); oil production tax; intangibles tax; license taxes and inspection fees.

MINNESOTA

Income Tax (Individual)

1% up to \$1,000	6% next	\$2,000
2% next	7% "	\$2,000
3% "	8% "	\$3,500
4% "	9% "	\$7,500
5% "	10% over	\$20,000

Income Tax (Corporation) 6%

Other Taxes Corporations

Organization and qualification fees; insurance company gross premium tax; public utility tax; excise tax on national and state banks.

Individuals

Inheritance tax; estate tax; gift tax; poll tax.

Motor Vehicles

Registration fees; mileage tax on interstate carriers; permit fees for motor carriers; gasoline tax; use fuel tax.

Alcoholic Beverages

Excise tax; license fees.

General

Grain handling tax; mortgage recording tax; property tax (real and personal); oleomargarine tax; severance tax; tax on tonnage of certain vessels; license taxes and inspection fees; aircraft tax.

MISSISSIPPI

Income Tax (Individual)

1% up to \$4,000	4% next	\$5,000
2% next	5% "	\$10,000
3% "	6% over	\$25,000

Income Tax (Corporation)

1% up to \$4,000	4% next	\$5,000
2% next	5% "	\$10,000
3% "	6% over	\$25,000

Other Taxes Corporations

Organization and qualification fees; franchise tax; bank capital and ad valorem tax; insurance premium tax; public utility taxes.

Individuals

Estate tax; poll tax.

Motor Vehicles

Registration tax; use fuel tax; gasoline tax; motor carrier fees.

Alcoholic Beverages

Excise tax on wholesalers and distributors of beer and wine; license taxes.

General

Admission tax; chain store tax; gross sales tax; license taxes and inspection fees; property tax; oil severance tax; timber severance tax; tobacco stamp tax; use tax.

MISSOURI

Income Tax (Individual)

1% up to \$1,000	2½% next	\$2,000
1½% next	3% "	\$2,000
2% "	3½% "	\$2,000
	4% over	\$9,000

Income Tax (Corporation) 2%**Other Taxes
Corporations**

Corporate franchise tax; organization and qualification fees; registration fee; bank share tax; insurance company tax; utility tax; express company tax.

Motor Vehicles

Gasoline tax; use fuel tax; registration tax; motor carrier fees.

Individuals

Estate tax; inheritance tax; poll tax.

Alcoholic Beverages

Excise taxes; license fees.

General

License taxes; inspection fees; property taxes; sales tax; wharfage tax.

MONTANA**Income Tax (Individual)**

1% up to \$2,000	3% next \$2,000
2% next \$2,000	4% over \$6,000

Income Tax (Corporation) None**Other Taxes
Corporations**

Organization and qualification fees; corporate license taxes; electric power company gross proceeds tax; express company gross receipts tax; insurance company premium tax; telegraph company tax; telephone company gross income tax.

Individuals

Inheritance tax; estate tax; poll tax.

Motor Vehicles

Gasoline tax; registration fees; carrier tax.

Alcoholic Beverages

Excise taxes; license fees.

General

Bank shares tax; chain store tax; coal mine operators' tax; moving picture theatre tax; natural gas distributors' tax; oil production tax; sleeping car tax; property taxes (real and personal); license taxes and inspection fees; cement and carbon black taxes.

NEBRASKA**Income Tax (Individual) None****Income Tax (Corporation) None****Other Taxes
Corporations**

Organization and qualification fees; corporation occupation tax; special insurance company tax; public utilities tax; building and loan associations tax.

Individuals

Inheritance taxes; estate tax; poll taxes; old age assistance tax.

Motor Vehicles

Registration tax; gasoline taxes; carriers' tax.

Alcoholic Beverages

License taxes; excise taxes.

General

Real and personal property taxes; license taxes and inspection fees; intangible property tax; bank share tax; imitation butter tax; grain brokers' tax.

NEVADA**Income Tax (Individual) None****Income Tax (Corporation) None****Other Taxes
Corporations**

Organization and qualification fees; bank share tax; insurance company tax on premiums; public utilities property and franchise tax.

Individuals

Poll tax.

Alcoholic Beverages

Excise taxes; license fees.

Motor Vehicles

Gasoline tax; use fuel tax; carrier tax; registration tax.

General

Proceeds of mines tax; property tax; license taxes and inspection fees.

NEW HAMPSHIRE**Income Tax (Individual) None****Income Tax (Corporation) None****Other Taxes
Corporations**

Organization and qualification fees; annual franchise fee; corporation report; bank shares tax; insurance company taxes.

Individuals

Inheritance tax; intangibles income tax; poll tax; estate tax.

Motor Vehicles

Gasoline tax; use fuel tax; registration fees; carriers' fees.

Alcoholic Beverages

Excise taxes; license fees.

General

License taxes and inspection fees; property taxes (real and personal); tobacco tax; savings bank tax.

NEW JERSEY

Income Tax (Individual) None

Income Tax (Corporation) None

Other Taxes
Corporations

Franchise tax; organization and qualification fees; corporate report; insurance company tax; street-railroad corporation tax; railroad tax; utility tax.

Individuals

Inheritance tax; estate tax; poll tax.

Motor Vehicles

Registration fee; gasoline tax; excise tax on interstate busses.

Alcoholic Beverages

Excise tax; license fees.

General

License taxes; inspection fees; real and personal property tax; bank stock tax.

NEW MEXICO

Income Tax (Individual)

1% up to \$10,000	3% next \$80,000
2% next \$10,000	4% over \$100,000

Income Tax (Corporation) 2%

Other Taxes
Corporations

Franchise taxes; organization and qualification fees; corporation fee; insurance company gross premium tax; express company gross receipts tax; utilities taxes.

Individuals

Succession tax; poll tax.

Motor Vehicles

Gasoline tax; registration fees; carriers tax.

Alcoholic Beverages

Excise tax; license fees.

General

License taxes and inspection fees; merchants' license tax; oil and gas production tax; property taxes (real and personal); severance tax; use tax; gross receipts tax; bank stock tax; cigarette tax.

NEW YORK

Income Tax (Individual)*

2% up to \$1,000	5% next \$2,000
3% next \$2,000	6% " \$2,000
4% " \$2,000	7% over \$9,000

(Net capital gain, $\frac{1}{2}$ of the above rates)

*For the past five years, legislative action has cut the actual tax load without changing the basic rates. The cuts were 25 percent in 1941, 1942, 1943 and 1944 calendar years and 1942, 1943, 1944 and 1945 fiscal years. For the 1945 calendar year and the fiscal year ending in 1946, the reduction was 50 percent. Any further reduction in the 1946 calendar year or fiscal year ending in 1947 requires further legislative action.

Income Tax (Corporation) None

Other Taxes
Initial Taxes

Organization tax; foreign corporation license fee.

Franchise Taxes

Business corporation; real estate corporations; utilities; financial institutions; agricultural cooperatives.

Individuals

Estate tax; unincorporated business tax.

Motor Vehicles

Gasoline tax; registration fees.

Alcoholic Beverages

Excise tax; license fees.

General

Property taxes (realty only); stock transfer tax; mortgage recording tax; cigarette tax; license and inspection fees; emergency utilities tax.

NORTH CAROLINA

Income Tax (Individual)

3% up to \$2,000	5% next \$2,000
4% next \$2,000	6% " \$4,000
	7% over \$10,000

Income Tax (Corporation) 6%

Other Taxes
Corporations

Organization and qualification fees; franchise tax; insurance company tax; public utility taxes.

Motor Vehicles

Gasoline tax; registration fees; carriers' taxes.

Individuals

Estate tax; gift tax; inheritance tax; poll tax.

Alcoholic Beverages

Annual license fees; excise tax.

General

Chain store tax; intangible personal property tax; property tax; oleomargarine tax; license taxes and inspection fees; sales tax use tax.

NORTH DAKOTA

Income Tax (Individual)

1% up to \$2,000	7½% next \$2,000
2% next \$2,000	10% " \$2,000
3% " \$1,000	12½% " \$5,000
5% " \$1,000	15% over \$15,000

Income Tax (Corporation)

3% up to \$3,000	5% next \$7,000
4% next \$5,000	6% over \$15,000

**Other Taxes
Corporations**

Organization and qualification fees; insurance company gross premiums tax; cooperative electric and telephone taxes.

Motor Vehicles

Gasoline taxes (use fuel tax); registration fees; motor bus license fees; interstate carriers' mileage tax; common carriers' certificate fee.

Individuals

Estate tax; per capital school tax.

Alcoholic Beverages

Excise tax; license taxes.

General

Bank shares tax; cigarette tax; grain storage tax; license taxes and inspection fees; oleomargarine tax; property taxes (real and personal); retail sales tax; use tax.

OHIO

Income Tax (Individual) None

Income Tax (Corporation) None

**Other Taxes
Corporations**

Franchise tax; organization and qualification fees; bank shares tax; insurance company tax; public utilities tax.

Individuals

Estate tax; inheritance tax.

Motor Vehicles

Gasoline tax; registration tax; carrier licenses.

Alcoholic Beverages

Excise taxes; license fees.

General

Admission tax; cigarette taxes; grain handling tax; license taxes and inspection fees; property taxes (real and personal); sales tax; use tax.

OKLAHOMA

Income Tax (Individual)

1% up to \$1,000	5% next	\$1,000
2% next	6% "	\$1,000
3% "	7% "	\$1,000
4% "	8% "	\$1,000
9% over \$8,000		

Income Tax (Corporation) 6%

**Other Taxes
Corporations**

Franchise tax; organization and qualification fees; insurance company tax; freight car tax.

Individuals

Estate tax; gift tax; poll tax.

Motor Vehicles

Excise tax on value at time of registration; gasoline tax; use fuel tax; carriers' tax; sales tax.

Alcoholic Beverages

License fees; excise tax on beer.

General

Airport tax; cigarette and tobacco stamp tax; cotton manufacturers' gross production tax; gross production tax on mining, oil, and gas production; intangibles tax; license taxes and inspection fees; mortgage tax; property taxes (real and personal); sales tax; use tax.

OREGON

Income Tax (Individual)

2% up to \$ 500	5% next	\$1,000
3% next \$ 500	6% "	\$1,000
4% " \$1,000	7% over	\$4,000

Income Tax (Corporation) 8% (excise tax)

**Other Taxes
Corporations**

Organization and qualification fees; franchise tax; insurance company gross premiums tax; public utility gross revenue fees.

Individuals

Estate tax; inheritance tax; gift tax.

Motor Vehicles

Gasoline tax (use fuel tax); license tax on gasoline dealers; registration fees; motor carrier taxes.

Alcoholic Beverages

Excise taxes; license fees.

General

License taxes and inspection fees; oil production tax; property taxes (real and personal); tax on vessels.

PENNSYLVANIA

Income Tax (Individual) None

Income Tax (Corporation) 4%

**Other Taxes
Corporations**

Organization and qualification bonus on charters; franchise tax; capital stock tax; public utilities gross receipts tax; gross receipts taxes on transportation companies; bank shares tax; private bankers' taxes; insurance company special taxes.

Individuals

Inheritance tax; estate tax.

Motor Vehicles

Gasoline tax; registration fees; carriers' tax.

Alcoholic Beverages

Liquor store sales tax; excise tax; license fees.

General

Corporate loans tax; real and personal property tax; municipal loans tax; stock transfer tax; license taxes and inspection fees.

RHODE ISLAND

Income Tax (Individual) None

Income Tax (Corporation) None

**Other Taxes
Corporations**

Organization and qualification fees; franchise tax; corporate excess tax; public utility gross income tax; insurance companies premiums tax; bank tax; financial institutions taxes.

Individuals

Legacy or succession tax; estate tax; gift tax; poll tax.

Motor Vehicles

Gasoline tax; registration fees.

Alcoholic Beverages

Excise taxes; license fees.

General

License taxes and inspection fees; tax on savings deposits; unincorporated business tax; property taxes (real and personal); tobacco tax.

SOUTH CAROLINA

Income Tax (Individual)

2% up to \$2,000	4% next \$2,000
3% next \$2,000	5% over \$6,000

Income Tax (Corporation) 4½ %

**Other Taxes
Corporations**

Organization and qualification fees; corporate franchise tax; insurance company taxes; public utility gross receipts tax.

Individuals

Estate tax; inheritance tax; poll tax.

Motor Vehicles

Gasoline tax; use fuel tax; registration fees; carriers' tax.

Alcoholic Beverages

Excise tax; occupation license fees.

General

Admissions tax; chain store tax; documentary stamp tax; license taxes and inspection fees; malt tax; oleomargarine tax; property taxes (real and personal); soft drinks tax; tobacco tax; playing cards tax; cartridges tax.

SOUTH DAKOTA

Income Tax (Individual) None

Income Tax (Corporation) None

**Other Taxes
Corporations**

Organization and qualification fees; bank income tax; insurance company gross premium tax; express company tax.

Motor Vehicles

Gasoline tax; use fuel tax; motor carrier's tax; registration fees; vehicle excise tax.

Individuals

Inheritance tax; poll tax.

Alcoholic Beverages

Excise tax; license fees.

General

Butter substitute tax; chain store tax; cigarette taxes; grain and seed storage tax; license taxes and inspection fees; severance tax; property taxes (real and personal); sales tax; use tax; money and credits tax.

TENNESSEE

Income Tax (Individual) None

Income Tax (Corporation)
3.75 % (excise tax)

**Other Taxes
Corporations**

Organization and qualification fees; annual corporation report; excise tax; insurance company tax; building and loan association special privilege tax; privilege tax on investment companies; public utilities taxes; franchise tax.

Individuals

Estate tax; inheritance tax; gift tax; poll tax.

Motor Vehicles

Gasoline tax; registration fees; use fuel tax; carrier tax.

Alcoholic Beverages

License taxes; excise taxes.

General

Carbonic acid gas tax; real estate transfer tax; mortgage recording tax; theater tax; soft drink bottlers' tax; oleomargarine tax; chain store tax; tobacco tax; license taxes; inspection fees; property taxes (real and personal); tax on income of stocks, bonds and notes.

TEXAS

Income Tax (Individual) None

Income Tax (Corporation) None

**Other Taxes
Corporations**

Franchise tax; organization and qualification fees; utility company gross receipt tax; insurance company tax.

Amusements

Admissions tax; excise taxes.

Individuals

Inheritance tax; estate tax; poll tax.

Alcoholic Beverages

License fees; excise taxes.

Motor Vehicles

Fuel tax; registration fees; motor bus license fees; common carriers' license fees; sales and use tax.

General

Bank share tax; carbon black manufacturing tax; cement distributors' tax; chain store tax; cigarette stamp tax; collection agencies gross receipts tax; license taxes and inspection fees; natural gas gross production tax; oil production tax; oleomargarine tax; property taxes (real and personal); stock transfer tax; sulphur production tax; cosmetics tax; playing card tax; textbook publishers' tax.

UTAH

Income Tax (Individual)

1% up to \$1,000	3% next	\$1,000
2% next	4% "	\$1,000
5% over \$4,000		

Income Tax (Corporation)

3% (franchise tax)

Other Taxes

Corporations

Bank tax; organization and qualification fees; insurance company gross premiums tax; public utility fees.

Individuals

Estate tax.

Alcoholic Beverages

Excise tax; license fees.

General

Cigarette stamp tax; license taxes and inspection fees; mining tax; oleomargarine tax; property taxes (real and personal); sales tax; use tax.

VERMONT

Income Tax (Individual)

2% to 4% depending on nature of income.

Income Tax (Corporation)

2% (franchise tax)

Other Taxes

Corporations

Organization and qualification fees; annual license tax; insurance company tax; public utilities tax; express and telegraph company tax.

Individuals

Estate tax; inheritance tax; poll tax.

Motor Vehicles

Gasoline tax; registration fees.

Alcoholic Beverages

Sales tax; license taxes.

General

Electrical energy tax; cigarette tax; license taxes and inspection fees; property taxes (real and personal); steamship tax.

VIRGINIA

Income Tax (Individual)

1½% up to \$3,000	2½% next	\$2,000
3% over \$5,000		

Income Tax (Corporation) 3%

Other Taxes

Corporations

Organization and qualification fees; insurance company taxes; franchise tax; public utilities taxes.

Alcoholic Beverages

Excise tax; license fees.

Individuals

Estate tax; gift tax; inheritance tax; poll tax.

Motor Vehicles

Registration fees; gross receipts tax; carriers' tax; gasoline tax.

General

Electrical energy tax; cigarette tax; license taxes and inspection fees; property taxes (real and personal); steamship tax.

WASHINGTON

Income Tax (Individual) None

Income Tax (Corporation) None

Other Taxes

Corporations

Organization and qualification fees; insurance company taxes; franchise tax; public utilities taxes.

Alcoholic Beverages

Excise tax; license fees.

Individuals

Estate tax; gift tax; inheritance tax; poll tax.

Motor Vehicles

Excise tax; registration fees; gasoline tax; use fuel tax.

General

Admission tax; cigarette tax; business and occupation tax; license taxes and inspection fees; oleomargarine tax; property taxes (real and personal); retail sales tax; compensating (use) tax; stamp tax on conveyances; timber tax; fuel oil tax.

WEST VIRGINIA

Income Tax (Individual) None

Income Tax (Corporation) None

Other Taxes

Corporations

Organization and qualification fees; franchise tax; insurance company tax; public utilities tax.

Alcoholic Beverages

Excise tax on beer; license fees.

Individuals

Inheritance tax; poll tax.

Motor Vehicles

Registration fees; gasoline tax; motor carrier tax.

General

Gross sales tax; chain store tax; license taxes and inspection fees; property taxes (real and personal); consumers' sales tax.

WISCONSIN**Income Tax (Individual)**

1% up to \$1,000	3½% next	\$1,000
1¼% next	4% "	\$1,000
1½% "	4½% "	\$1,000
2% "	5% "	\$1,000
2½% "	5½% "	\$1,000
3% "	6% "	\$1,000
7% over \$12,000		

Plus a surtax of ½ normal tax on all income above a certain level.

Income Tax (Corporation)

2% up to \$1,000	3½% next	\$1,000
2½% next	4% "	\$1,000
3% "	5% "	\$1,000
6% over \$6,000		

Other Taxes**Corporations**

Organization and qualification fees; insurance company tax; public utilities taxes.

Motor Vehicles

Gasoline tax; motor carrier tax; registration fees.

Individuals

Estate tax; gift tax; inheritance tax.

Alcoholic Beverages

Excise taxes; license tax.

General

License taxes and inspection fees; property taxes (real and personal); privilege dividend tax; oleomargarine tax; cigarette tax; tax on vessels; forest lands tax; wharfage tax; grain storage tax; timber tax.

WYOMING**Income Tax (Individual) None****Income Tax (Corporation) None****Other Taxes****Corporations**

Organization and qualification fees; franchise tax; insurance company tax; express company tax.

Alcoholic Beverages

License fees; excise tax.

Individuals

Inheritance tax; poll tax.

Motor Vehicles

Motor carrier tax; registration fees; gasoline tax.

General

Bank share tax; gross products of mines tax; license taxes and inspection fees; oleomargarine tax; property taxes (real and personal); sales tax; use tax.

Social Security

The Social Security Act, enacted August 14, 1935 and considerably broadened by amendments in 1939, established ten separate programs. Two programs are insurance systems involving pay-roll taxes: a federal system of old-age and survivors' insurance, and a federal-state system of unemployment insurance. The other eight programs involve federal grants-in-aid to the states for the needy aged, the needy blind, dependent children, maternal and child-health services, crippled-children services, child-welfare services, vocational rehabilitation, and public-health services.

The administration of the Act is largely the responsibility of the Federal Security Administrator. Within the Federal Security Agency, the Social Security Administration, headed by Commissioner for Social Security Arthur J. Altmeyer, handles old-age and survivors' insurance, certain unemployment-insurance functions, and the programs for assistance to the needy aged, children, and blind. The Children's Bureau,

also part of the Federal Security Agency, administers the other children's services.

Until July 16, 1946, activities of the present Social Security Administration were carried out by the now-abolished Social Security Board, and the children's services were administered by the Children's Bureau as part of the Labor Department.

Old-Age and Survivors' Insurance

The old-age and survivors' insurance program began operating in 1937, although only old-age lump-sum benefits were paid before 1940. It is the only wholly federal program.

Benefits

Benefits available to workers who are "fully insured" under the system are:

1. A monthly retirement benefit for a worker 65 or over.
2. A supplemental monthly benefit for a retired worker's wife, if she is 65 or over, and for his children, if under 18.

3. Monthly benefits to the following survivors of a deceased worker, regardless of his age at his death:

- (a) Widow, if 65 or over.
- (b) Widow at any age if she has dependent children in her care.
- (c) Children, if unmarried and under 18.
- (d) Parents, if 65 or over and dependent on the deceased, but only if the worker dies leaving no widow or child entitled to benefits.

4. A lump-sum benefit, which is paid only if a worker dies leaving no widow, child, or parent entitled to monthly benefits at the time of the death. It is paid to the widow or widower, if he or she was living with the deceased at the time of death. If there is no such person, the persons paying the worker's burial expenses may be reimbursed for expenses paid. Lump-sum benefits can be paid under the above circumstances even if the worker was drawing old-age benefits before his death and his wife or child were also receiving benefits on his wages. Furthermore, the lump sum is not in place of monthly benefits payable later to survivors and does not affect their rights to monthly benefits.

Workers who are not "fully" insured but are merely "currently" insured are entitled only to those benefits for survivors listed under 3 (b), 3 (c), and 4 above.

A worker is "fully" insured if he has been paid \$50 in taxable employment in each of 40 quarters, or if he has worked in taxable employment half the time after 1936 (or after becoming 21, if later) and before he reaches 65 or dies.

A worker is "currently" insured if he has received wages of at least \$50 in taxable employment for at least 6 of the 12 calendar quarters immediately preceding his death.

The amount of the worker's primary benefits—that paid to the worker when he reaches 65—is determined as follows:

(1.) Figure the worker's "average monthly wage" by dividing his total taxable wages by the number of months elapsed since January 1, 1937. (Since time elapsed is a factor, a person who has worked continuously in covered employment will receive a larger benefit than one who has worked in exempt employment part of the time or has been unemployed.)

(2.) Take 40% of the first \$50 of the average monthly wage and add to it 10% of the remainder (not exceeding \$200, however). Then add to this sum 1% of the total for each year in which the worker received at least \$200 in covered employment. If the resulting sum is less than \$10, it is increased to \$10.

Example: A worker filing a claim in January 1946 was paid \$150 a month in covered employment for years 1937-40 and 1944-45. In years 1941-43 he worked on a

farm in exempt employment. (1) His wages for the years 1937-40 and 1944-45 total \$10,800. This is divided by the number of months since 1937: 108. His average monthly wage is \$100. (2) To find his benefit amount take \$20 (40% of the first \$50 of his monthly wage) and add to it \$5 (10% of the remaining \$50) and to this total (\$25) add \$1.50 (1% of \$25, multiplied by 6). The benefit amount is \$26.50 per month.

The amounts of other benefits are derived from the primary benefit as follows:

Wife: one-half of primary benefit.

Child: one-half of primary benefit.

Widow: three-quarters of primary benefit.

Parent: one-half of primary benefit.

Lump-sum benefit: 6 times the primary benefit. (If paid to persons paying burial expenses, the benefit is limited to expenses incurred.)

Maximum total of benefits which may be paid on any one worker's wages is the least of the following: \$85; 80% of the worker's average monthly wage; or twice the primary benefit. If benefits are already \$20 or less, they will not be further reduced.

A person earning \$15 or more in a month in covered employment is not eligible for a benefit for that month. Benefits to a wife or child are also canceled during any month in which the insured worker earns \$15.

Application for benefits is made to the nearest field office of the Social Security Administration.

Rates and Coverage

All employers covered by the federal insurance contributions law are required to pay a 1% tax on wages paid to employees, and each employee also pays a 1% tax on his pay. Tax rates are scheduled to rise to 2½% in 1948 and to 3% in 1949 and thereafter. Previously scheduled increases ranging from rates of 1½% to 2½% have been voted down by Congress for eight successive years, the rate remaining frozen at 1%.

Neither employer nor employee is required to pay tax on that part of a worker's pay which is over \$3,000 in any calendar year. If an employee does so because he worked for more than one employer, he may apply for a refund of excess tax at the end of the year.

The employee's tax is deducted by the employer and is paid over to the Internal Revenue Bureau at the end of each quarter together with the employer's tax. Although these taxes are initially paid into the Treasury, a corresponding amount is appropriated each year from the Treasury into the Old-Age and Survivors Insurance Trust Fund, from which benefits are paid.

TABLE NO. 1
Examples of Retirement and Survivor's Benefits

Worker's average monthly pay	Monthly retirement		Monthly survivors			Lump-sum death payments
	Worker	Worker and wife	Widow	Widow and one child	One child or one parent	
3 years' coverage:						
\$50	\$20.60	\$30.90	\$15.45	\$25.75	\$10.30	\$123.60
100	25.75	38.63	19.31	32.19	12.88	154.50
150	30.90	46.35	23.18	38.63	15.45	185.40
250	41.20	61.80	30.90	51.50	20.60	247.20
5 years' coverage:						
\$50	\$21.00	\$31.50	\$15.75	\$26.25	\$10.50	\$126.00
100	26.25	39.38	19.69	32.82	13.13	157.50
150	31.50	47.25	23.63	39.38	15.75	189.00
250	42.00	63.00	31.50	52.50	21.00	252.00
10 years' coverage:						
\$50	\$22.00	\$33.00	\$16.50	\$27.50	\$11.00	\$132.00
100	27.50	41.25	20.63	34.38	13.75	165.00
150	33.00	49.50	24.75	41.25	16.50	198.00
250	44.00	66.00	33.00	55.00	22.00	264.00
20 years' coverage:						
\$50	\$24.00	\$36.00	\$18.00	\$30.00	\$12.00	\$144.00
100	30.00	45.00	22.50	37.50	15.00	180.00
150	36.00	54.00	27.00	45.00	18.00	216.00
250	48.00	72.00	36.00	60.00	24.00	288.00
30 years' coverage:						
\$50	\$26.00	\$39.00	\$19.50	\$32.50	\$13.00	\$156.00
100	32.50	48.75	24.38	40.63	16.25	195.00
150	39.00	58.50	29.25	48.75	19.50	234.00
250	52.00	78.00	39.00	65.00	26.00	312.00
40 years' coverage:						
\$50	\$28.00	\$40.00	\$21.00	\$35.00	\$14.00	\$168.00
100	35.00	52.50	26.25	43.75	17.50	210.00
150	42.00	63.00	31.50	52.50	21.00	252.00
250	56.00	84.00	42.00	70.00	28.00	336.00

An employer is liable for payment and deduction of tax as soon as he employs one employee. The length of employment and the number of employees is immaterial.

The following workers are exempt, and no tax is incurred on their wages: self-employed; agricultural labor; domestic service; casual labor not in the course of the employer's business; persons working for a son, daughter or spouse, or for a parent if the child is under 21; government employees (including United Nations, etc.); employees of nonprofit religious, charitable or educational organizations; railroad workers; certain employees of organizations exempt from income tax; student nurses and interns; workers on small fishing vessels; newsboys under 18.

A worker is either completely exempt or completely covered by the law, depending on which type of work occupies more than half of the pay period. If work is equally divided, all his work is covered.

Veterans of World War II, who would not otherwise have received wage credits

for their time in the service, were in 1946 voted special coverage in the event of death within 3 years after discharge. In such cases they are considered to have died fully insured, to have an average monthly wage of at least \$160, and to have had \$200 annual wages for each year of at least 30 days' active service.

Board Wage Records

Every employee must have a social security number. An account with the Social Security Administration is set up for each worker, and to this account are credited all wage payments reported. When a benefit claim is filed, these accounts are used to determine if the claimant is eligible for benefits and, if he is, the amount of the benefit to be paid.

By the end of 1945, 70% of the population over 13 years of age held social security numbers. Although more than 1.4 million persons 65 or over were entitled by their wage record to draw benefits, only 518,000 actually drew benefits in December, 1945.

TABLE NO. 2
Old Age and Survivors' Insurance:
Summary of Operations
 (in millions of dollars)

Year	Wage taxes collected	Interest received	Trust fund at end of year	Benefits paid*
1937.....	\$ 493	\$ 2.3	\$ 766	\$ 1.3
1938.....	474	15.4	1.132	10.5
1939.....	568	27.0	1.724	13.9
1940.....	637	42.9	2,031	40.6
1941.....	789	56.2	2,762	93.9
1942.....	1,012	72.3	3,688	137.0
1943.....	1,239	88.3	4,820	172.9
1944.....	1,316	106.7	6,005	218.0
1945.....	1,285	134.3	7,121	273.9

*Only lump-sum payments were made until 1940.

Unemployment Compensation

Federal and state governments cooperate in the administration of the unemployment insurance program. The federal law, beginning with 1936, imposed an excise tax on employment and established the framework for the federal-state system. All states (including District of Columbia, Hawaii and Alaska) followed suit, most of them in 1936 and 1937. Benefits became payable in most states in 1938 and 1939. (Wisconsin was the only state to pass such a law earlier—taxes were first collected in July, 1934.)

Benefits

The state laws determine who shall receive unemployment benefits, in what amount, and under what conditions. The provisions vary in each state, but generally a person is entitled to benefits for any week during which he is totally or partly unemployed, provided he has earned a sufficient amount of wages from an employer subject to the state law, has filed a claim for benefits, has served a "waiting period" of one week or so, and is not disqualified.

Disqualification means that the payment of benefits is postponed for a certain number of weeks, or is suspended entirely, because the worker is in one of the following situations:

1. Not able to work—ill, aged or disabled to the point that he cannot perform any marketable services.
2. Not available for work—not willing to do work for which he is fitted by experience, education or training, or places unreasonable restrictions on hours, wages, shift or skill he will accept, with the result that he is not likely to find the job he wants.
3. Quit work—left his job voluntarily without good cause. "Good cause" is some sound reason which would impel an ordinarily prudent person to quit, such as an unreasonable increase of hours without a

pay increase, a substantial reduction in wages, requirement of excessive unpaid overtime, a transfer to work which injures the person's health, an unreasonably heavy work quota, unjustified reprimands or abuse from superior, etc.

4. Discharged for misconduct—discharged because of conduct detrimental to his employer's interests—for example, refusal to obey orders, absence from work, tardiness, violation of employer's rules, intoxication at work, etc.

5. Refused job offer of suitable work without good cause—refused a job which is reasonably fitted to his training, experience, or skills, pays the prevailing wages for similar work, is not detrimental to his health or safety, has working conditions which are not substantially less favorable than those prevailing in similar work in the locality, and is within a reasonable distance from his home. If the job offer is suitable, the person is expected to accept it unless he has good cause for refusing, such as reasonably good prospects of employment elsewhere, unreasonable conditions required by employer, etc.

6. Involved in labor dispute. Even if the worker is not striking, he may be disqualified if he is a member of the union involved; or his wages, hours or working conditions will be affected by the outcome of the strike; or he serves on or refuses to cross picket lines; or engages in a sympathy strike. In almost all states benefits cannot be paid as long as the dispute persists. Only states where strikers can receive benefits are: Pennsylvania—after 4 weeks; New York—after 7 weeks; Rhode Island—after 8 weeks; Tennessee—after 1-4 weeks.

Some state laws also disqualify workers who leave because of marriage, marital duties, pregnancy, to attend school, or who receive dismissal pay, vacation pay, workmen's compensation payments, or veterans' readjustment allowances.

A worker seeking unemployment benefits must file a claim at the local office of the state unemployment bureau and register for work with the employment service. At that time, a benefit year (usually the year running from the date of his claim) and a base period (usually the year ending from 3 to 6 months before the filing of his claim) are established for him. His benefit amount will be a percentage of the wages earned in his base period, but no more than the maximum amount allowed. He is entitled to draw benefits for the set number of weeks during the rest of that benefit year. When he has exhausted these benefits he will not be eligible again until he can establish a new benefit year for which he has the necessary base period wages.

An employee moving out of the state does not lose benefit rights earned under that state law. He merely files a claim for

benefits at the local office in the state where he is now located and this office will act as agent for the other state in paying him benefits.

Tax

An employer is generally liable for a maximum total tax of 3% of his pay roll—0.3% to the federal government and 2.7%, or less, to the state. Although the federal government itself technically levies a pay-roll tax of 3%, in practice this usually amounts to only 0.3% because the employer is allowed a credit of as much as 2.7% for taxes paid to the states. The federal tax goes into general revenues, from which funds are appropriated each year to the states to cover administrative costs. Taxes collected by the states are used solely for benefit payments.

Under the federal law, which is merely a taxing statute, the Treasury Department collects the tax, which is paid annually. The state laws, under which benefits are paid, are administered by the various state unemployment insurance agencies.

Only four states require contributions from employees in addition to those from employers: Ala.—the rate varies from 0.1% to 1.0% depending on the rate of the employer; Cal.—1%; N. J.—1%; R. I.—the .5% unemployment tax has been suspended until June 30, 1948 and is being paid for sickness compensation instead.

Merit Rating

Almost all states collect unemployment taxes under "merit rating" systems. These systems allow tax rates lower than the usual standard rate of 2.7% to those employers who have some success in stabilizing employment, provided they have paid the tax for 3 or 4 years. In most states low rates go to employers who have fewest ex-employees drawing unemployment benefits; in New York, tax credits go to firms with little or no decrease in pay roll.

The average tax rate in merit rating states in 1945 was 1.5%. Over the years 1941-45, employers were saved approximately 2 billion dollars in taxes because of merit rating.

Coverage

Employers are liable for the federal tax if they have eight or more employees on some day of each of 20 weeks in a year.

State requirements for liability vary, ranging from eight employees in the state down to a single employee. An employer who has employees in several states may be subject to as many state laws.

Liability for both federal and state taxes is limited to the first \$3,000 of a worker's pay in a year.

Certain employees are exempt from tax under federal and most state laws and are not counted in determining whether an employer is subject to tax. These are self-

TABLE NO. 3
State Unemployment Compensation Maximums
(corrected to Oct. 1, 1946)

State	Weekly benefit	Duration (in weeks)	State	Weekly benefit	Duration (in weeks)
Alabama	\$20	20	Montana	\$15	16
Alaska	25	25	Nebraska	18	18
Arizona	15	14	Nevada	24	20
Arkansas	15	16	New Hampshire	20	20
California	20	16	New Jersey	22	26
Colorado	15	16	New Mexico	15	16
Connecticut	28	20	New York	21	26
Delaware	18	22	North Carolina	20	16
D. C.	20	20	North Dakota	20	20
Florida	15	16	Ohio	21	22
Georgia	18	16	Oklahoma	18	20
Hawaii	25	20	Oregon	18	40
Idaho	18	17	Pennsylvania	20	20
Illinois	20	26	Rhode Island	18	18
Indiana	20	20	South Carolina	20	16
Iowa	18	18	South Dakota	15	20
Kansas	16	20	Tennessee	15	16
Kentucky	16	20	Texas	18	18
Louisiana	18	20	Utah	25	23
Maine	20	20	Vermont	20	20
Maryland	20	26	Virginia	15	16
Massachusetts	25	23	Washington	25	26
Michigan	28	20	West Virginia	20	21
Minnesota	20	20	Wisconsin	20	26
Mississippi	15	14	Wyoming	20	20
Missouri	20	20			

TABLE NO. 4

Total Unemployment Compensation Benefits

Source: Social Security Board.

Year	Total benefits (in thousands)	Average number of beneficiaries per week
1940.....	\$518,700.4	982,392
1941.....	344,320.7	621,065
1942.....	344,084.1	541,495
1943.....	79,643.1	115,454
1944.....	62,384.6	79,306
1945.....	445,864.8	462,261
1946 (first six months only)	688,526.9	1,456,531

employed, agricultural workers, domestic workers, members of a proprietor's immediate family, railroad workers, government employees, employees of nonprofit educational, charitable or religious organizations, insurance agents, newsboys under 18, student nurses and interns, and casual labor not in the course of an employer's business. Although maritime workers had previously been exempt under the federal law and in some states, the federal law was amended to include them as of July 1, 1946, and coverage is being similarly extended in a growing number of states.

Public Assistance

Under the Social Security Act, federal grants are made to the states for public assistance to needy persons, provided the state plan for distribution of the aid has been approved by the federal government. All states and territories cooperate in old-age assistance plans: all but Alaska cooperate in plans for the needy blind; all but Nevada share in plans for needy chil-

dren; all states and Puerto Rico have approved plans for maternal and child-health services, services for crippled children, and child-welfare services. Beginning January, 1947, grants for maternal and child-health services may be made to the Virgin Islands.

The federal contribution to the states, until October 1, 1946, was usually one-half of the assistance payment, up to the maximum fixed by federal law. Since that date, federal contributions for assistance to needy aged and the blind are: \$10 of the first \$15 and 50% of any amount between \$15 and \$45. Federal contributions for dependent children are: \$6 of the first \$9 and 50% of the balance. The maximum payment to which the federal government will contribute for needy children is \$24 for the first child and \$15 for each additional child. Only those children are eligible who are under 16 (or under 18 and still at school) and who have been deprived of parental support or care and are living with a member of the family.

Under the \$40 maximum for old-age assistance in effect before October 1, 1946, the average payment varied considerably from state to state, ranging from \$10 to \$40.

Social Security for Railroad Workers

Social security for most workers in the railroad transportation industry is provided under a national system apart from that established by the Social Security Act. The Railroad Retirement Act was first passed in 1934, but was held unconstitutional by the Supreme Court. The present Act was passed in 1935 and was substantially amended in 1937 and again

TABLE NO. 5

Public Aid Expenditures, January 1933-June 1946
(in thousands of dollars)

Source: Social Security Board.

	Total	Special types of assistance payments			
		Old-age assistance	Aid to dependent children	Aid to the blind	General assistance
1933.....	\$1,223,779	\$26,071	\$40,504	\$5,839	\$758,752
1934.....	2,380,865	32,244	40,686	7,073	1,200,360
1935.....	2,532,467	64,966	41,727	7,970	1,433,180
1936.....	3,119,013	155,241	49,462	12,813	439,004
1937.....	2,653,918	310,441	71,253	16,171	406,881
1938.....	3,236,600	392,386	97,447	19,154	476,201
1939.....	3,185,447	430,666	114,954	20,437	481,723
1940.....	2,723,408	472,791	132,925	22,703	394,398
1941.....	2,227,527	540,446	153,028	22,785	273,007
1942.....	1,546,241	601,400	158,032	24,495	180,471
1943.....	979,492	649,970	139,952	24,827	110,911
1944.....	935,148	690,728	134,672	25,022	89,347
1945.....	981,326	725,683	149,108	26,521	86,258
1946 January thru June ¹	558,551	390,947	95,163	14,746	57,695

¹Preliminary.

in 1946. It is administered by the Railroad Retirement Board.

Taxes supporting the system are collected under the Carriers Taxing Act by the Bureau of Internal Revenue. Taxes are levied on both employers and employees at these rates: 1937-39: 2¼%; 1940-42: 3%; 1943-45: 3¼%; 1946: 3½%; 1947-48: 5¾%; 1949-51: 6%; 1952 on: 6¼%.

Benefits provided are: retirement benefits at 65 or over, and, under certain circumstances, 60; survivors' benefits; disability benefits.

Under the Railroad Insurance Act, also administered by the Railroad Retirement Board, railroad workers receive unemployment insurance, and after July 1, 1947, sickness compensation and maternity benefits. Costs are paid by employers at a rate of 3% of pay roll up to \$300 a month per worker. Taxes are collected by the Board.

Federal Civil Service

The civil-service retirement system, first established in 1920, now provides a retirement system for almost all federal employees not under another plan. It provides for a retirement benefit at 70, or at 55 or 60 with 30 years' service, or at 62 with 15 years' service; a disability retirement benefit; a deferred annuity for separated employees with 5 years' or more service when they reach the age of 55 or 62; refunds if service is less than 5 years; death benefit to a wife or dependent child in the amount of the worker's credit in the fund.

Veterans' Benefits

Mustering-out pay

Veterans—except, in general, those ranking higher than Army captain or Navy lieutenant honorably let out after Pearl Harbor—get mustering-out pay as follows:

- \$100 for those who served less than 60 days.
- \$200 for those who served 60 days or more in continental United States.
- \$300 for those who served 60 days or more outside continental United States or in Alaska.

If a discharged veteran dies before receiving payment, distribution of mustering-out pay is limited to spouse, children, or parents, in that order.

Job reinstatement

The Selective Service Act of 1940 grants to all honorably discharged veterans:

1. Their old job back, or one of like seniority, status and pay.
2. Guarantee against discharge except for cause for one year after reinstatement. During that time the veteran cannot be demoted nor can his job benefits be reduced.

Employees contribute 5% of their pay, and this contribution is matched by the government.

Health Insurance

With the exception of state laws for sickness compensation in Rhode Island and California, health insurance is on a voluntary basis. An increasing number of companies have set up plans for their employees, either on their own or by signing up with an insurance company or nonprofit organization. Many unions have plans for their members, as do other private groups.

Popular forms of insurance are hospitalization costs, medical and surgical care, and pay for time lost through sickness.

The largest of the nonprofit plans is the Blue Cross, whose 85 hospital-service plans have over 21,000,000 subscribers throughout the country.

During 1946, the Senate Labor and Education Committee held hearings on Senator Wagner's National Health Insurance Bill. This proposal would set up a national system of insurance, covering virtually all workers. Benefits would cover: general medical services and services of specialists at a doctor's office, at home and in the hospital; general and special dental services; home nursing; laboratory expenses; certain hospitalization costs. The program would be financed by 3% of earnings up to \$3,600 a year.

Qualifications on job rights

The veteran must be reapplying for a job that was not temporary at the time he left it; the employer need not reinstate him if the employer's circumstances have so changed as to make rehiring impossible or unreasonable; the veteran must apply for his old job within 90 days of discharge; he need not be rehired if he is no longer qualified to perform his job. He can be laid off if work slackens.

How the veteran can enforce his rights

By suit in the U. S. District Court with the assistance of the U. S. Attorney.

National Guard, reserve officers, and retired personnel have Selective Service rights. Benefits are not limited to draftees—anyone, including WACS, WAVES, SPARS, and Marines (female), who entered active service after May 1, 1940, is covered.

Vocational rehabilitation

Vocational rehabilitation courses not exceeding 4 years and placement in suitable, gainful employment are available for any

veteran who served on or after September 16, 1940, and was honorably discharged with a service-connected disability which can be overcome by training.

The Veterans Administration arranges for the training, pays for tuition and books and the veteran receives, in addition, training allowance added to his disability pension to achieve the following minimums:

- \$105 per month, if without a dependent
- \$115 per month, if with a dependent, *plus*
- (a) \$10 for one child and \$7 for each additional child, and
- (b) \$15 for a dependent parent.

If the veteran's disability pension exceeds the above minimum he gets the larger amount. Once employed, his basic pension award will in no way be reduced because he has succeeded in overcoming his handicap.

Disability Pensions

Veterans having a 10 percent or more disability resulting from disease or injury incurred in or aggravated by war service are eligible to receive a pension if their separation from the service was not under dishonorable conditions. Pension rates vary from \$13.80 to \$138 per month, depending on the extent of disability. Pension payments are "untouchable" in legal proceedings and may not be assigned. Pension awards are within the jurisdiction of the Veterans Administration. A veteran's widow and surviving children are also eligible to receive pension benefits.

Veterans preference

Veterans who have been separated from the service under honorable conditions must be given preference in certification for appointment, in appointment, in reinstatement, in re-employment and in retention in federal civil service positions. Specifically with respect to the positions of crier or bailiff in federal courts, the Court Crier or Bailiff Preference Act grants preference in appointment to veterans.

National Service Life Insurance

Persons in service and veterans who never owned any GI insurance, but who were in service between October 8, 1940 and September 2, 1945, are entitled to take out insurance in any amount between \$1,000 and \$10,000 in multiples of \$500. The insurance is on a five-year level premium term plan, and in the first instance is granted against the death of the insured while in service. It is convertible to ordinary life, 20- or 30-payment life, 20-year endowment or endowment at the age of 60 or 65, on any premium date after one year within the five-year term.

Veterans have the right to convert the insurance without medical examination, except (a) where necessary to determine

whether the insured is totally disabled and (b) upon complete surrender of the policy while it is still in force. Reconversion may also be made to higher premium rate, or, upon proof of good health to a lower premium rate.

Beneficiaries are restricted to widow, widower, child, stepchild, or illegitimate child (if the latter two are specifically designated as beneficiaries), parent, brother or sister for any insurance which matured before August 1, 1946. For insurance maturing on or after that date beneficiaries may be any person or persons, firm, corporation or any other legal entity individually or as trustee. Where no beneficiary has been designated, or where the beneficiary has died, payments are made to widow or widower, child or children (including adopted children), parents or brothers and sisters of the insured. For insurance maturing before August 1, 1946, payments are made to beneficiaries in equal monthly installments for 120 months if the beneficiary is over 30 years at the time the policy matures. If the beneficiary is under 30 years at policy maturity, the insurance is payable in 240 monthly installments. Instead of either of these types of payment, however, the insured or the first beneficiary may elect settlement as a refund life income. For insurance maturing after August 1, 1946, payment is made to the beneficiary in 36 monthly installments unless one of these options is elected instead: payment in one lump sum; payment in specified number (no less than 36) of monthly installments; payment in installments throughout life; refund life income. If the insured becomes disabled while in service the government assumes payment of the premiums for him.

Servicemen's Readjustment Act of 1944

The "GI Bill of Rights" applies to veterans who served on or after September 16, 1940. It provides for hospitalization, education, loans, employment, and readjustment allowances.

Hospitalization

Veterans are guaranteed against disability discharge without explanation of their rights to apply for benefits and the opportunity to file a claim; right to fitting and training in the use of prosthetic appliances is guaranteed; veterans are protected against being required to sign any kind of statement as to the origin, incurrence or aggravation of any disease or injury—such statements are *null and void*.

Education

A veteran who has served 90 days or more since September 16, 1940 and before the termination of the war may avail himself of educational opportunities at government expense. He must start the course not later

than 4 years after separation or termination of the war, whichever is later.

A veteran who qualifies is entitled to 12 months of education or its equivalent in part-time study plus additional time up to three years (a total of 4 years) in direct proportion to the time he spent in service. Therefore, a veteran with 32 months of service is entitled to 44 months of education or training.

The Veterans Administration will pay tuition and school fees up to a total of \$500 for each school year in attendance at an approved institution. No board, lodging, or other living or travel expenses are paid, but while at school the veteran is entitled to \$65 per month living allowance, and \$90 if he has dependents. Allowance will not be paid if the veteran is earning \$175 (if single) or \$200 (if he has dependents) in full- or part-time employment while he is attending school. Where the amount of his earnings is less than those ceilings, subsistence allowance payments will be made to bring the total up to the ceilings.

The veteran may elect any course of study if the school will accept him, and he must maintain satisfactory standing.

A veteran may also elect to take apprentice or on-the-job training in an industrial establishment. His earnings in training plus the government allowance cannot exceed \$175 a month if single, \$200 if he has dependents.

Loans to Veterans

Three types are available: 1. For purchase or construction of homes; 2. for purchase of farms and farm equipment; 3. for purchase of business and business property.

In all three types, eligibility requirements are that the veteran be honorably separated on or after September 16, 1940 and before the termination of the war; service of at least 90 days or a service-connected disability as reason for the discharge or release; application must be made within ten years after the end of the war.

The government will guarantee 50 percent of the loan—up to a maximum guaranty of \$2,000 on non-real-estate loans, and \$4,000 on real-estate loans, or prorated portions on loans of both types or in combination. Maximum interest rate is 4 percent. Terms of loans: (a) on farm realty—40 years; (b) other real estate—25 years; (c) non-real estate—10 years. (Under certain circumstances second loan guarantees may be undertaken with the approval of the Administrator.)

Home Loans

Proceeds must be used for purchase of property, construction or improvement costs—the property to be occupied by the veteran as his home. Mortgage amortization

terms must be in proper proportion to the veteran's present and expected income and expenses. Proposed price must not exceed reasonable value as determined by an appraiser designated by the Administrator.

Business loans

Business loans will be approved when they are to be used (a) for engaging in business or pursuing a gainful occupation; (b) for purchasing land, buildings, supplies, equipment, machinery, etc., for business; (c) for constructing or repairing real or personal property to be used in business; (d) for working capital.

There must be reasonable likelihood of success, as indicated by the veteran's ability and experience and the conditions under which he intends to conduct the business. Purchase price must be reasonable—as determined by an appraiser appointed by the Administrator.

Farm Loans

Farm loans will be made to a veteran for purchase or repair of lands, machinery, equipment, livestock, etc., for farming.

The ability and experience tests are similar to those applying to business loans. Appraisal for reasonable value is also required. Veteran must have reasonable prospect of success in farming.

Readjustment Allowance

This section of the GI Bill provides for payment of \$20 a week for a maximum of 52 weeks to unemployed veterans residing in the United States. It also provides for the payment to a partially-employed veteran whose weekly wages are less than \$23 of the sum of \$20 less the amount of his wages in excess of \$3. The veteran must be able to work, registered with a public employment office and must not be receiving an allowance through any other provision of the Act. A self-employed veteran earning less than \$100 per month is eligible for an allowance representing the difference between his net earnings and \$100. Allowances are available to an eligible veteran no later than 2 years after his discharge or two years after termination of the war, whichever is later.

Wyatt Housing Objectives*

Source: National Housing Administration.

	1946	1947
Conventional.....	650,000	850,000
Prefabricated.....	250,000	600,000
Temporary or reused war housing..	200,000	.....
Conversions.....	50,000	50,000
Trailers.....	50,000	.....
Total residential homes.....	1,200,000	1,500,000

*Homes costing less than \$10,000 a unit or renting under \$80 a month.

NATIONAL DEFENSE



STRATEGICAL SUMMARY OF WORLD WAR II

by

MAJOR GEORGE FIELDING ELIOT

Commentator on Military Affairs and

Special Writer for

THE NEW YORK HERALD TRIBUNE




SELECTIVE SERVICE

by

MAJOR-GENERAL LEWIS B. HERSHEY



EUROPE, 1920: 

and at the height of
German conquest, 1942 : 

DECLARATIONS OF WAR

Address of the President of the United States before a joint session of the two Houses of Congress requesting that Congress declare that there exists a state of war between the United States and the Japanese Empire.

To the Congress of the United States:

Yesterday, December 7, 1941—a date which will live in infamy—the United States of America was suddenly and deliberately attacked by naval and air forces of the Empire of Japan.

The United States was at peace with that Nation and, at the solicitation of Japan, was still in conversation with its Government and its Emperor looking toward the maintenance of peace in the Pacific. Indeed, one hour after Japanese air squadrons had commenced bombing in Oahu, the Japanese Ambassador to the United States and his colleague delivered to the Secretary of State a formal reply to a recent American message. While this reply stated that it seemed useless to continue the existing diplomatic negotiations, it contained no threat or hint of war or armed attack.

It will be recorded that the distance of Hawaii from Japan makes it obvious that the attack was deliberately planned many days or even weeks ago. During the intervening time the Japanese Government has deliberately sought to deceive the United States by false statements and expressions of hope for continued peace.

The attack yesterday on the Hawaiian Islands has caused severe damage to American naval and military forces. Very many American lives have been lost. In addition, American ships have been reported torpedoed on the high seas between San Francisco and Honolulu.

Yesterday the Japanese Government also launched an attack against Malaya.

Last night the Japanese forces attacked Hong Kong.

Last night Japanese forces attacked Guam.

Last night Japanese forces attacked the Philippine Islands.

Last night the Japanese attacked Wake Island.

This morning the Japanese attacked Midway Island.

Japan has, therefore, undertaken a surprise offensive extending throughout the Pacific area. The facts of yesterday speak for themselves. The people of the United States have already formed their opinions and well understand the implications to the very life and safety of our Nation.

As Commander in Chief of the Army and Navy I have directed that all measures be taken for our defense.

Always will we remember the character of the onslaught against us.

No matter how long it may take us to overcome these premeditated invasions, the American people in their righteousness might win through to absolute victory.

I believe I interpret the will of the Congress and of the people when I assert that we will not only defend ourselves to the uttermost but will make very certain that this form of treachery shall never endanger us again.

Hostilities exist. There is no blinking at the fact that our people, our territory, and our interests are in grave danger.

With confidence in our armed forces—with the unbounded determination of our people—we will gain the inevitable triumph—so help us God.

I ask that the Congress declare that since the unprovoked and dastardly attack by Japan on Sunday, December 7, a state of war has existed between the United States and the Japanese Empire.

FRANKLIN D. ROOSEVELT

THE WHITE HOUSE

December 8, 1941.

Public Law 328—77th Congress Joint Resolution

Declaring that a state of war exists between the Imperial Government of Japan and the Government and the people of the United States and making provisions to prosecute the same.

Whereas the Imperial Government of Japan has committed unprovoked acts of war against the Government and the people of the United States of America: Therefore be it

Resolved by the Senate and House of Representatives of the United States of America in Congress assembled, That the state of war between the United States and the Imperial Government of Japan which has thus been thrust upon the United States is hereby formally declared;

and the President is hereby authorized and directed to employ the entire naval and military forces of the United States and the resources of the Government to carry on war against the Imperial Government of Japan; and, to bring the conflict to a successful termination, all of the resources of the country are hereby pledged by the Congress of the United States.

Approved, December 8, 1941, 4:10 P.M., E. S. T.

Declarations of War—(cont.)

Message from the President of the United States transmitting a request that the Congress recognize a state of war between the United States and Germany, and between the United States and Italy.

To the Congress of the United States:

On the morning of December eleventh, the Government of Germany, pursuing its course of world conquest, declared war against the United States.

The long known and the long expected has thus taken place. The forces endeavoring to enslave the entire world now are moving towards this hemisphere.

Never before has there been a greater challenge to life, liberty, and civilization.

Delay invites greater danger. Rapid and united effort by all of the peoples of the

world who are determined to remain free will ensure a world victory of the forces of justice and of righteousness over the forces of savagery and of barbarism.

Italy also has declared war against the United States.

I therefore request the Congress to recognize a state of war between the United States and Germany, and between the United States and Italy.

FRANKLIN D. ROOSEVELT

THE WHITE HOUSE
December 11, 1941.

Public Law 331—77th Congress Joint Resolution

Declaring that a state of war exists between the Government of Germany and the Government and the people of the United States and making provision to prosecute the same.

Whereas the Government of Germany has formally declared war against the Government and the people of the United States of America: Therefore be it

Resolved by the Senate and the House of Representatives of the United States of America in Congress assembled, That the state of war between the United States and the Government of Germany which has thus been thrust upon the United States is hereby formally declared; and the President is hereby authorized and directed to employ the entire naval and military forces

of the United States and the resources of the Government to carry on war against the Government of Germany; and, to bring the conflict to a successful termination, all of the resources of the country are hereby pledged by the Congress of the United States.

Approved, December 11, 1941, 3:05 P.M.,
E. S. T.

In similar wording, war was declared against the Government of Italy by Joint Resolution, Public Law 332, approved December 11, 1941, 3:06 P.M.

Declarations of War, Invasions and Surrenders of World War II

1939 Sept. 1, Germany invades Poland.
Sept. 3, Great Britain and France declare war on Germany.
Nov. 30, Russia invades Finland.

1940 April 9, Germany invades Denmark and Norway.
May 10, Germany invades Holland, Belgium and Luxembourg.
May 16, Germany invades France.
June 10, Italy declares war on France and Great Britain.
Oct. 7, Germany invades Rumania.
Oct. 28, Italy invades Greece.

1941 April 6, Germany invades Yugoslavia and Greece.
June 22, Germany declares war on Russia.
Dec. 7, Japan bombs Pearl Harbor, declares war on U. S. and Gt. Brit.
Dec. 8, United States and Great Britain declare war against Japan.
Dec. 8, China declares war on Japan, Germany, and Italy.
Dec. 11, Germany and Italy declare war on the United States.

Dec. 11, United States declares war against Germany and Italy.

1942 May 22, Mexico declares war on Japan, Germany and Italy.
Aug. 22, Brazil declares war on Germany and Italy.

1943 April 7, Bolivia declares war against the Axis Powers.
Sept. 3, Allies invade Italy.
Sept. 8, Italy surrenders to the Allies.
Oct. 13, Italy (Badoglio government) declares war against Germany.

1944 June 6, D-Day—Allies invade the Channel Coast.

Sept. 13, Rumania signs armistice.
1945 Feb. 23, Turkey and Egypt declare war against Axis.
March 27, Argentina declares war on Germany.

May 2, German army in Italy surrenders to Allies.

May 8, Germany surrenders unconditionally to the Allies.

Aug. 8, Russia declares war on Japan.

Sept. 2, Japan surrenders.

Strategical Summary of World War II

By George Fielding Eliot

A. THE OBJECTIVES AND STRATEGY OF THE GERMAN HIGH COMMAND

The objective of Adolf Hitler was the complete domination of Europe, the Middle East and North Africa as the first stage on the road to German world-empire. Domination meant complete elimination of all military and political opposition, and reduction of non-German peoples to serfdom.

The basic preparation was accomplished without war. Germany was re-armed, Austria swallowed, Czechoslovakia conquered. Germany thus acquired a consolidated central position in Europe and control of major lines of operation to the east, west and south. Hitler realized that further steps were likely to result in war with Britain, France, eventually with the Soviet Union, and perhaps the United States. His plan was to dispose of Germany's European opponents singly, in succession, and thus leave the United States isolated and more or less helpless.

The steps envisaged by the German High Command were:

(1) The conquest of Poland. This was likely to bring about war with Great Britain and France. They were not prepared. Poland *could* be beaten alone—if Russia would hold off. Accordingly, the Germans made a temporary political agreement to divide Poland between Germany and Russia.

(2) The conquest of Denmark and Norway. This was an essential preliminary to invading France. It secured the exposed northern flank of Germany against air and amphibious attacks from Britain based on Scandinavia. It brought German warships and planes to the open Atlantic to attack Britain's sea life lines.

(3) The destruction of France by blitzkrieg methods, tested in Poland. The German High Command thought the British would recognize their situation as hopeless and make peace, leaving Germany free for the fourth step.

(4) The conquest of the Soviet Union. Germany then would be master of all the resources of Europe and would be able to deal with the Middle East and North Africa at leisure. The United States would be helpless to interfere.

The war began, September 1, 1939, and Hitler's first step went off with clockwork precision. Poland was quickly crushed. The Germans were left undisturbed by Britain and France during the winter of 1939-1940.

There followed the equally perfect execution of the second step—Denmark and Norway. The Danes had no power to resist. The Norwegians fought as best they could.

British efforts to aid them proved futile. The Luftwaffe ruled the air.

The third step in the German program also was successful. The French army, supported by a small British expeditionary force, was unable to deal with the highly mobile, mechanized German ground-air attack. The French had little armor, their few anti-tank guns were ineffective, their small air force was overwhelmed. The troops fought well, but their leadership failed them. The French General Staff had not understood the nature of the next war. France, completely overpowered, surrendered June 22, 1940.

But—the British did not sue for peace, as expected. They said, in the words of a recruiting poster of the day: "Very well, then. Alone." The British expeditionary force, evacuated with great skill and determination from Dunkerque, had lost heavily in men and had left behind all its guns and heavy equipment. There was only one good division in the British Isles, not more than 50 tanks and 200 field guns of all kinds. The Royal Air Force was weak. Had the Germans immediately set on foot an invasion of Great Britain, it would have been virtually certain of success. Britain would have been overwhelmed, and the only advanced base from which American power could have been brought to bear against European Germany would have been eliminated.

The Germans made the fatal decision to try for air superiority over the R.A.F. first. The result was the aerial Battle of Britain—and a smashing defeat for the Luftwaffe. It was the first major defeat that Hitler had ever sustained. The Germans might have won had they persisted. The British were sending planes into each day's fighting fresh from the factories; only the skill, determination, and endurance of the pilots provided the margin of victory. The German air staff, appalled by their losses, recommended that the attempt be discontinued. The Battle of Britain was won by British courage. It was lost by German faintheartedness. And with it was lost Hitler's best chance of ultimate victory.

For it was now too late to think of invading the British Isles. The American government, shocked into action by the collapse of France, was rushing supplies across the Atlantic to Britain. The reserve weapons of the American Army—600,000 rifles, 20,000 machine guns, 3,000 pieces of artillery—were sent to arm the British Home Guard and the newly raised divisions until the British could make weapons. Adolf Hitler, like Napoleon Bonaparte more than one hundred years before, turned away from the shores of the Eng-

lish Channel to seek empty victories in Eastern Europe.

Meanwhile he tried to starve out the British Isles by choking off, with planes and submarines, the flow of food and supplies moving across the seas from America and other countries. This was the Battle of the Atlantic. For a while the Germans came uncomfortably close to winning it. An appalling number of ships was sunk. Both England and the United States kept building new ships frantically. The British hunted down Nazi submarines with dogged persistence. American measures to protect shipping in the Atlantic took on almost the character of an undeclared naval war, while we were still neutral.

Meanwhile, a new dislocation of the German program occurred. No doubt Hitler had planned ultimately a conquest of the Balkans, North Africa and the Middle East; but this phase probably was scheduled for later, after the defeat of Russia. Instead, the Germans had to make a time-consuming side excursion into the Balkans and North Africa—before tackling Russia.

This was brought on by Hitler's preposterous ally, Italy. Mussolini had invaded Greece and had become bogged down. His army in North Africa was getting beaten by the British. Hitler had to go to his rescue, lest the Allies win the Mediterranean.

So Hitler marched South. Hungary, Rumania and Bulgaria he acquired by the mere terror of his name, plus political jugglery. The Yugoslavs resisted; he overwhelmed their armies and attacked the Greeks. The British were compelled to quit chasing the Italians in North Africa in order to throw a pitifully small expeditionary force into Greece. The Germans drove it into the sea. German power was thus firmly established in the Balkans, the eastern Mediterranean and in North Africa. But these victories were gained at a price which Hitler could not afford to pay: a price in time. Russia had been preparing, England recovering, in that spring of 1941.

The fourth and greatest of his four steps to the domination of Europe lay before Hitler: the destruction of the Red army. And upon that step there was a time limit—the approaching winter. If by the end of the year the Russian power remained unbroken, Hitler would face in the spring of 1942 the one eventuality he dreaded most, and which he had planned so carefully to avoid—a war on two fronts, with a major opponent to the east and another to the west. The one German hope now was to destroy Russia before the winter set in, then turn in full strength upon Britain.

Truly every day lost in commencing the planned assault on Russia was a day which might never be regained. The resistance of the Yugoslavs, the Greeks, and the little British expeditionary force seemed futile

enough at the time. But due to this Balkan diversion, Hitler began his great assault on Russia not in April, but late in June of 1941.

At first the Germans made swift progress. The Russian armies retreated steadily. The Germans swept across the Baltic States, White Russia, the Ukraine. On the north, they came to the gates of Leningrad and were checked. On the south they entered Rostov, and besieged Sevastopol. But their great weight was in the center, their goal, Moscow.

As his armies moved nearer the Russian capital, Hitler proclaimed Russia's utter defeat. "The Russian power," he said, "has fallen in the dirt, never to rise again."

But winter descended on the land. The German armies were not equipped for the Russian winter and they suffered cruelly. The Luftwaffe was grounded. The Russians fought on, for they understood winter warfare. Moscow did not yield to the Nazi invader.

The German High Command decided to wait out the winter in front of Moscow. Hitler's strides toward world domination had gone well at first, but they began to falter. Time began to work against him.

And then on December 7, 1941, the Japanese attacked the United States Pacific Fleet at Pearl Harbor. Within twenty-four hours, the United States was at war not only with Japan but also with Germany.

B. THE OBJECTIVES AND STRATEGY OF THE JAPANESE HIGH COMMAND

The military clique ruling Japan had long schemed to conquer the basic raw materials of modern industry which Japan lacked—oil, iron, coal, rubber and tin. They intended to acquire the Dutch East Indies and Malaya. Likewise they intended to push Russia back west of Lake Baikal, and to bring China under Japanese control. China would furnish a ready-made market for Japanese manufactured goods.

One school of Japanese military thought held that the continental part of the program should be carried through first, beginning with the conquest of China. This group was spearheaded by the Kwangtung army—the Japanese army of occupation in Manchuria. The other school, chiefly composed of naval officers, held that the first thing to be done was to seize the Dutch East Indies and Malaya, at the same time taking over the Philippine Islands. These officers knew this would mean war with the United States and Great Britain but they felt this was the major effort, and that if it were successful, an isolated China would fall easy prey.

The Kwangtung army group won, at first. After the conquest of Manchuria in 1931, the Japanese proceeded to the conquest of China as a whole. The result,

however, was much as the naval officers had foreseen. After five years of fighting, the Japanese in 1941 held the Chinese railways, the lower course of the Yangtze River, sea-ports and major inland cities, but very little else. The Chinese still had organized troops in the field, and guerrilla bands who gave the Japanese no rest. Japan, whose normal revenues were sufficient to provide for a standing army of only 225,000 men, was being compelled to maintain more than 1,000,000 men under arms. The average Japanese at home was getting very sick of pulling in his belt a little tighter each year. The attitude of the United States was becoming more and more menacing. From supplying iron, oil and other exports, the United States turned by 1941 to a virtual embargo on all shipments to Japan. Under these conditions the Japanese effort in China would slowly grind to a halt unless other sources of supply could be obtained.

The European war seemed a godsend. Britain was desperate; France and Holland were out of the picture; Russia was supposed to be collapsing. The United States was becoming more and more involved in the Battle of the Atlantic. Surely such a chance would not be likely to recur. If Germany were victorious in Europe it would not be long before Germany would appear in the Far East demanding a share of the rich spoils of that region. The Japanese wanted to be well established in their new empire by that time.

The first phase of the Japanese war plan called for seizing Malaya, Singapore, the Dutch East Indies and the Philippines. They calculated, rightly, that this would be accomplished fairly readily—provided they first knocked out the United States Pacific Fleet. That was the reason for the sneak attack on Pearl Harbor.

The second phase of the Japanese war plan was to prevent recovery and offensive return by the enemy, particularly the United States.

This phase seems to have included some or all of the following: (1) a possible invasion of Australia, or at least the complete isolation of that island-continent; (2) invasion of the Hawaiian Islands via Midway, with a concurrent attack on the Aleutian Islands to form a northern flank; (3) attack on the American coast, raiding our aviation industries; (4) stimulation of unrest and eventual revolution in India.

The major purpose of the second phase was to deprive the United States of any base from which an offensive against Japan could be set on foot. Like the German plan, the Japanese plan was based on initial superiority in fighting power in a particular region; and like the Germans, the Japanese counted on being able to conquer additional resources which would put them more nearly on a level with ene-

mies of greater potential strength than their own. But they would need time to organize and digest those resources, and to intrench themselves both militarily and economically in their new empire. The second phase of their plan was intended to gain time. When at last we were ready to attack them, they expected to be so strongly intrenched that we would count it not worth the cost to attack them across the vast reaches of the Pacific.

It will be noted, however, that—also like the German plan—the Japanese plan had a time limit. The longer it was denied complete success, the less chance it had of success. This applies especially to the matter of bases. Failure to knock out the Russian armies by the winter of 1941 spelled failure to the Germans. Failure to eliminate the American-Australian bases in the Pacific in 1942 spelled failure to the Japanese.

C. THE MILITARY SITUATION ON DECEMBER 7, 1941

In that December of 1941, the United States, being confronted with two major enemies at once, had to make highly fateful strategic decisions.

America could not hope to launch a major offensive on either side of the world for at least a year. Far from helping us, our European Allies, Britain and Russia, had their backs to the wall and needed help from us. We could not afford to let either one be knocked out by Germany.

On the other hand, Japan could be expected to gain strength as she advanced if she were permitted to digest the resources of the Asiatic lands she conquered. A full-scale Japanese attack on the Hawaiian Islands was a definite possibility. Both Australia and India were exposed and almost defenseless. So was Alaska. The Panama Canal and the west coast of the United States could not be considered as out of Japan's eventual reach.

The great decision was taken: the United States would launch its first major offensive, when the time was ripe, against Germany.

The reasons for choosing Germany first, and leaving Japan until later, were compelling. Germany was nearer; Germany was already engaged by powerful forces (the Russian Armies) which could not be shifted elsewhere. We had an accessible base—the British Isles—close to the heart of Germany, while we still had to win such a base against Japan. And Germany was still capable of inflicting defeat on one of our major Allies—Russia—while Japan was hardly capable of doing more to China than she had already done, and could probably be contained so that she could not reach any of the others provided Australia and India and Hawaii could be held.

There was a risk, of course. There are risks in all military decisions. The implementation of this decision called for judgment—enough force to be sent to the Pacific to contain Japan, but not too much lest it detract from the major effort in Europe. The risks were taken, and the decision proved justified.

Having made that major decision, the United States mapped out its initial objectives as follows:

(1) To keep open the lines of sea communication with Great Britain and Australia, and to open and keep open as far as possible lines of communication with Russia and China, in order that American supplies might reach our various Allies.

(2) To maintain the central position in the Middle East in order to prevent a junction of our two major enemies. The Germans were threatening the Middle East, both through Egypt and through southern Russia. If they broke through, they might join hands with the Japanese. Then Germany could draw upon the raw materials of all southern Asia; and could provide Japan with the technical assistance she so badly needed.

(3) To build up our naval and air power in the Pacific as rapidly as possible in order to prevent a Japanese invasion of Australia and to check or contain other Japanese offensive operations—perhaps against the Aleutians, Hawaii or Ceylon. If we saved these positions, an offensive return against Japan would eventually become possible.

(4) To build up in the continental United States a powerful air force and a powerful ground striking force with which to take the offensive on a major scale at the earliest possible date. The offensive power of the United States, once it was ready, was to form the final reserve of freedom, the decisive element which would bring us victory. It was of vital importance that this force should not be wasted away in dribblets. From this consideration arose much of the subsequent clamor on two heads—the so-called second front uproar, and the cry that we were letting the Pacific war go by default. To the infinite credit of those who had in hand the leadership of the Allied military effort, that clamor was resisted.

(5) To bring under a single command the mobile offensive power of the United States and the nations of the British Commonwealth, so that the resources of all might be employed in accordance with a unified plan and under unified direction. This consideration led to the creation of the Combined Chiefs of Staff, which turned out to be the most effective agency for the conduct of war which the wit of man has ever devised.

D. THE PRINCIPLE OF UNITY OF COMMAND

The Combined Chiefs of Staff consisted of two parts—the American Joint Chiefs of Staff and the British Chiefs of Staff. The one sat usually in Washington, the other in London. Each consisted of the chiefs of staff of the army and navy, plus for Britain the chief of the air staff and for the United States the commanding general of the Army Air Forces; in addition, each included the personal chief of staff of the head of the government.

The headquarters and working offices of the Combined Chiefs of Staff, as such, were in Washington, where the British Chiefs of Staff were represented by a senior officer acting as the representative of Prime Minister Churchill assisted by a general, an admiral and an air marshal, together with several hundred subordinate British officers of all three services.

The American members of the Combined Chiefs of Staff throughout the war were General of the Army George C. Marshall, Chief of Staff of the Army; Fleet Admiral Ernest J. King, Chief of Naval Operations; General of the Army Henry H. Arnold, Commanding General, Army Air Forces; and Fleet Admiral William D. Leahy, Chief of Staff to the President.

The British members were Field Marshal Sir Alan Brooke (now Lord Alanbrooke), Chief of the Imperial General Staff; Admiral of the Fleet Sir Dudley Pound, First Sea Lord and Chief of the Naval Staff, who was later succeeded by Admiral of the Fleet Sir Andrew Browne Cunningham (now Lord Cunningham); Marshal of the Royal Air Force Sir Charles Portal (now Lord Portal), Chief of the Air Staff; and General Sir Hastings Ismay, Chief of Staff to the Prime Minister.

The senior British representative with the Combined Chiefs of Staff in Washington, was, during most of the war, Field Marshal Sir John Dill; after his death in November, 1944, he was succeeded by Field Marshal Sir Henry Maitland Wilson (now Lord Wilson).

This was the agency to which was committed the higher direction of the war for both countries. The Combined Chiefs of Staff were responsible jointly to the President and the Prime Minister, who were their only superiors. The principle of combined command was carried out in every theater of war where American or British forces operated. In each theater a Commander in Chief was appointed who had under his command all the Allied forces in the theater, land, sea and air. Each Commander in Chief was directly responsible to the Combined Chiefs of Staff, and to them alone.

The first of these combined commands to be created was that in the Southwest Pacific, to which General Douglas Mac-

Arthur was appointed. Other combined commands subsequently created were the Mediterranean, originally under General Dwight D. Eisenhower and later under Field Marshal Sir Henry Maitland Wilson; the Allied Expeditionary Force for the liberation of Europe, under General Dwight D. Eisenhower; and the Southeast Asia Command under Admiral Lord Louis Mountbatten. The command designated as the U. S. Pacific Fleet and Pacific Ocean Areas, under Admiral Chester W. Nimitz, was not at first an Allied command, but entirely American, though British forces later came under Admiral Nimitz' direction. The China-Burma-India theater, commanded originally by General Joseph Stilwell, was later divided between the Southeast Asia Command and the China theater, in which Generalissimo Chiang Kai-shek was commander in chief. The Russians never participated in the activities of the Combined Chiefs of Staff, nor did their forces in whole or in part ever come under the direction of an Allied commander in chief.

E. PROGRESS OF MAJOR OPERATIONS FROM DECEMBER 7, 1941 TO END OF WAR

In Section A. of this summary, a brief account has been given of the progress of the war prior to the entry of the United States. In this section we shall trace in broad general terms the events in the various major theaters of operations from that date until the end of the war.

1. THE RUSSIAN THEATER, December 7, 1941 to the end of 1942.

Having failed to take Moscow, the German armies retired to their "winter line" from the Baltic to the Black Sea, which held fast. They prepared to launch a new major offensive in 1942.

Sound military judgment would have dictated an attack from the German center in a northeasterly direction, with the object of engaging and destroying the main Russian reserves which were concentrated east and northeast of Moscow. Had this been accomplished, European Russia would have been in German hands. The Russian armies were the true German objective, as the commander in chief on the Russian front, Field Marshal von Bock, knew.

Hitler, however, had other views. In his opinion, the Germans would do better to drive straight east to the Volga in the area of Stalingrad and invade the Caucasus. The purpose was to cut Russia in two, depriving the Russians of their Caucasian oil supply. Beyond this, as General Marshall observed in his report, "was evidently the Napoleonic dream of a conquest of the Middle East and India by a gigantic double envelopment, with one pincer descending from the Caucasus through Tiflis

and the other from North Africa across Egypt, Palestine and the Arabian Desert."

But the line of communications of the German army before Stalingrad and in the Caucasus was fatally insecure as long as the Russian armies stood undefeated on its northern flank. Hitler, as General Keitel admitted, "failed completely to estimate properly the reserve of Russian industrial and productive power east of the Urals," and overruled the recommendations of his High Command.

The German armies, in the offensive of 1942, drove to the gates of Stalingrad and the foothills of the Caucasus. At Stalingrad, the Russians turned and stood fast at last. There, 1300 miles from the eastern borders of Germany, far from the sources of German power, the Germans fought desperately from August to November to break the Russian resistance. They poured in men, they poured in supplies. It was in vain. Stalingrad held.

On November 22, 1942, the Russian counteroffensive rolled down upon the exhausted German armies. The Germans fell back from Stalingrad, leaving an encircled army there to interrupt the Russian rail communications as long as possible. They fell back from the Caucasus. The last great German offensive in Russia was at an end.

From that day forward, Germany was on the defensive, a beaten nation.

2. THE NORTH AFRICAN THEATER, December 7, 1941 to the end of 1942:

Hitler's grand plan for conquering the Middle East and joining the Japanese was broken in the north by the Russians. No better future attended the southern prong of the offensive, which was to thrust across North Africa, from Libya into Egypt, aiming toward the valley of the Nile and the Suez Canal.

In June, 1942, Marshal Rommel launched a German-Italian offensive which swept the British out of Libya, back across the frontier of Egypt, and seemed on the point of taking Alexandria, Cairo and Suez. But he was checked at El Alamein, on the north coast of Egypt. Both sides began building up for a new offensive—the Germans to continue their push for the Nile, the British to drive them back out of Egypt.

In October, 1942, the British 8th Army under Field Marshal (then General) Sir Bernard L. Montgomery launched a major attack at El Alamein and completely routed the Axis army of Marshal Rommel. Montgomery chased Rommel west across the top of Africa.

The first great American offensive against Germany was neatly timed to coincide with Montgomery's victory. In November, American and British troops landed in the western part of North Africa, under the command of General Eisenhower.

The Russians had been demanding a second front—an invasion of western Europe by the British and Americans in order to divert German power from the Red Army. But the American army was not ready and the British army was too weak. A landing in France was likely to result in a disaster. Even a limited operation, due to the shortage of shipping and landing craft and the persistence of the U-boat campaign, was considered out of the question.

But the Germans could not react in their full strength against a landing in French North Africa. Defense of that area would require a great effort, especially in aircraft, which would help the Russians. If the invasion succeeded, the Germans would be confronted with the possibility of further invasion of a Southern France or Italy, which would pin down more German troops for garrison duty. The army of Marshal Rommel would be caught between two fires and its fate would be sealed. With the elimination of Rommel, the whole of the North African shore would be in Allied hands.

There was, of course, to be considered the possibility that the Vichy French garrison would resist, and that in consequence Marshal Pétain might declare war on the Allies and bring French forces, especially the French fleet, into action against us. This was a chance that had to be taken.

In the outcome, there was some French resistance, but so careful had been the preliminary undercover preparation (well before the invasion began) that it soon was transformed into French cooperation. The French fleet, instead of joining the Germans, was scuttled in Toulon harbor by its crews. Morocco and Algeria fell into our hands almost at a blow. The Germans began a desperate attempt to reinforce Tunisia; an Allied drive on the naval base of Bizerte just fell short of reaching its objective in time. But as Allied reinforcements poured into French North Africa, and the pursuit of Rommel continued, it was clear as 1942 ended that in Africa as well as in Russia, the initiative had definitely passed from the Axis to the Allies. The siege of Fortress Europa was about to begin.

3. THE PACIFIC THEATER, December 7, 1941, to the end of 1942.

In the first five months after Pearl Harbor, every important military position in the Philippines and the Dutch East Indies was captured by the Japanese; all organized resistance ceased; the Allied air and naval forces were destroyed or driven to distant ports of refuge. Singapore fell in February. Thailand joined the Japanese; Burma was invaded, the British and Chinese forces there decisively defeated,

Rangoon and Mandalay taken, and the Japanese reached the Chinese frontier, cutting the Burma Road, China's last link with the outer world. Guam and Wake islands were captured. The Japanese took over New Britain and seized positions on the north shore of Australian New Guinea and in the Solomon Islands. Corregidor fell on May 6, 1942.

As Corregidor fell the Japanese were starting on the second phase of their strategy, a move toward Australia. They sent a fleet toward Port Moresby, on the south shore of Australian New Guinea—an admirable steppingstone for operations against Australia. But American naval forces engaged the Japanese fleet in the Battle of the Coral Sea. Both sides suffered severe losses in a far-flung fight, in which the airplane was the principal weapon. The Japanese suffered worst. Not again were Japanese warships to appear in strength so near Australia; the Japanese navy had in this direction, apparently, reached the outermost limits of its power.

Early in June the Japanese made their second major effort by sea. This was no less than an attack directed on Midway Island, and it was intended to be followed through by an all-out amphibious assault on the Hawaiian Islands to deprive the United States of its focal point of operations in the Central Pacific. The result was the Battle of Midway and a smashing defeat for the Japanese at the hands of American naval and land-based air forces—the worst disaster that the Imperial Japanese navy had ever suffered. A simultaneous air raid on Dutch Harbor, in the Aleutians, was beaten off, and all the Japanese accomplished was the occupation of the two small Aleutian Islands of Kiska and Attu.

Nevertheless, the Japanese assembled forces in the Solomon Islands, building a large airfield on Guadalcanal for a drive south to the New Hebrides and New Caledonia. This was part of the Japanese plan to isolate Australia as a preliminary to invading it.

To protect Australia, our essential base in the Southwest Pacific, America took the offensive against the Japanese forces in the Solomons.

Rarely in the long history of warfare has there been a bolder decision. The Japanese fleet was superior to ours in almost every element of fighting strength. The Japanese air force outnumbered ours in all classes of combat planes. The Solomon Islands lay 3,000 miles away from our nearest major base at Pearl Harbor; they were but 1,000 miles from the Japanese base at Truk in the Carolines.

On August 7, 1942, American marines began landing at Guadalcanal and Tulagi. They won a foothold. But offshore, we

suffered a naval disaster. The Japanese sank four heavy cruisers. For a time our troops on Guadalcanal were virtually isolated, and they faced brutal Japanese opposition on the island. The Americans stayed there, but just barely able to do so. Then the tide turned—we won a series of naval victories—and as the year ended, though the Japanese were still trying, with some success, to reinforce their troops on Guadalcanal, they were reduced to operating by night. It was clear that they had lost command of the sea and the air in that area, unless they chose to put in their main fleet and risk all.

In truth, the initiative in the Pacific had as definitely passed to the Allies as it had in Europe. This was not as yet realized, either in Japan or in the United States. After Guadalcanal, the Japanese never attempted another major offensive in any theater, by land or sea.

Like the Germans after Stalingrad, however, they clung desperately to every position they held until driven from it. They wasted away their naval and air strength in dribblets to reinforce positions they could not hold. They had captured their empire, but they were to prove incapable of holding it.

It had taken three years for the tide of war to turn against the Germans. Against the Japanese it turned in twelve months.

4. 1943 THE YEAR OF PREPARATION: ALL THEATERS:

In 1943 the Allies, not yet prepared to take the offensive in full force, strove to improve their positions while making ready their great reserves of power.

In Russia the campaign of 1943 was one of steady, but on the whole unspectacular, Russian progress toward the west. By the year's end, the greater part of the soil of Russia had been cleared of the German invaders. The Germans clung desperately to every inch of ground until they were driven from it. They held exposed forward positions to the bitter end rather than adopt the principle of elastic defense in depth. This cast a curious and sinister light on the effect of the Nazi mentality on military operations. Already one heard talk of Fortress Europa. One recalled the 1940 words of Goering—"If we Germans lose this war, we will pull down with us the pillars of western civilization." The Germans were sacrificing their best troops in the vain attempt to hold ground which could not be held.

In the Pacific, 1943 passed in what seemed to be small-scale operations in the Solomon Islands and New Guinea plus the recovery of Attu and Kiska. Toward the year's end, the first hint of the coming major offensive in the Central Pacific came with the sudden seizure of Tarawa and Makin islands—the former with heavy

casualties which obscured in many minds the significance of this gambit in a game which was to end in Tokyo Bay. The Japanese throughout the year persisted in frittering away their forces in dribblets.

The Mediterranean captured the major headlines. The destruction of the Axis armies in Tunisia—the conquest of Sicily, followed by that of Sardinia and Corsica—the invasion of Italy, the sanguinary struggle at Salerno, the advance northward—the fall of Mussolini and the surrender of the Italian government and the Italian fleet—these were developments of a wholly preparatory and preliminary nature as far as the attack on Germany was concerned, but they seemed vitally important news at the time.

Two developments in 1943 were of major military importance to the progress of the war against Germany. One was the final winning of the Battle of the Atlantic and the virtual extinction of the submarine as a major factor in the war. The other was the rising scale of air attacks upon Germany.

Ever since the Germans had, in 1940, come into possession of the ports and air bases of Norway and France they had continued their persistent and dangerous efforts to cut off the seaborne communications of the British Isles. These were the lifelines of the British people; and the only means by which military effort of any sort could be carried on from the British Isles as a base against Germany. With the perfection of new anti-submarine measures (notably radar and small escort carriers) Allied shipping losses began to go down in 1943, while ship construction went up. Finally in the summer of 1943 the losses had fallen low enough to be negligible, or nearly so, from a military point of view, while submarines were being sunk in increasing numbers. After August, 1943, it could be said that the Battle of the Atlantic was won, and a major American offensive in western Europe became possible.

The great air attacks against Germany were likewise an essential preliminary of invasion. During 1943 these attacks were expanded from the British night raids to a "round the clock" basis by American daylight bombers. The occupation of air bases in southern Italy gave new direction to these operations. The bomb targets during 1943 were the focal points of German industry. It was a preparation without which the invasion of Europe could not possibly have succeeded.

5. 1944 THE YEAR OF DECISION: EUROPEAN THEATER:

As 1944 opened, the world was electric with expectancy. Men hoped that the great decisions of the war were at hand, that the long struggle was drawing to a

close. There was no longer any doubt of the outcome. The only question was: "How long?" Of all the great decisions expected of that year, the greatest was the invasion of western Europe by the American and British armies.

The year began with an intensification of the Allied air attacks on Germany on a scale beyond anything previously known. On almost every operational day, 700 to 1,000 heavy bombers were out over Germany. The delivery of 2,000 to 3,000 tons of bombs on a single target area in a single raid became commonplace. In February the Allied bombers suddenly, and significantly, shifted their attention to the destruction of German aircraft plants—then almost wholly engaged in producing fighter planes for the defense of Germany—with crippling results. To this was added the constant challenge to German fighter strength in the air. As spring wore on, the weight of bombing attack shifted to the coastal area and the railways behind it. The pattern of invasion began to take form.

Before the great blow fell, there was a prelude in Italy, where the Allied armies—stalled during the previous winter before Cassino—jumped off in a major offensive on May 11, which carried them to Rome by June 4th, though it did not produce the final destruction of the German armies in the peninsula.

In the east, the Russians maintained their steady series of offensives, now on one part of their long front, now on another. They drove into Poland, they reached the Dniester and crossed into Rumania.

Meanwhile, in Great Britain, the power of the United States gathered for the final and decisive assault. On June 6, the armies of General Eisenhower, under a cloud of air cover and guarded by a huge naval force, were launched across the Channel.

Once more the Germans, under Field Marshal Rommel, made war according to Hitler's principles. The Atlantic Wall had been so propagandized in the German Army that every man had an almost hysterical faith in it. Rommel's plan for the defense of the French coast was a rigid unyielding linear defense of his forward positions. He had succeeded in inducing his superiors in Berlin to overrule his immediate military Chief, Field Marshal von Rundstedt, who wanted to hold the forward positions lightly and to concentrate all available reserves, especially armor, for a mobile defense based on counter-attack.

The result was that when the Allies, by concentrating overwhelming power on a narrow front, broke through the Atlantic Wall, there were no reserves available to prevent them from establishing a secure lodgment. Nor did German reserves thereafter arrive at any one time in sufficient numbers to effect anything decisive. For

this there were three reasons. First, a large part of the German Army in France was immobilized on the northeastern coast, opposite the Pas-de-Calais. The Allies had carefully built up deceptive threats of a second landing there. This error the Germans did not discover for several weeks. Second, the Allied air forces systematically broke down every rail and highway bridge over the rivers Seine and Loire, thus virtually isolating the northwestern segment of France and the German troops there. Third, every road, every train, practically every German soldier was under constant attack by the overwhelmingly superior Allied air power. German reinforcements arrived only in small detachments, slowly, by night marches, lacking much of their transport and equipment, long behind their schedule. As each detachment reached the front it usually found itself immediately involved in the fighting. The Germans could build up no reserves to undertake decisive counterattack.

The Allied forces were being built up rapidly. Dependent at first on the use of open beaches and the wonderful artificial harbors with which they had been provided, they also soon had several small seaports for their use, and after the capture of the port of Cherbourg, their build-up was spectacularly rapid. There was plenty of hard fighting, but there was never a time when the Germans enjoyed sufficient superiority at any crucial point to accomplish very much. Von Kluge, who had relieved Von Rundstedt as commander in chief in the west, wanted to withdraw deep into the interior of France to save his force when the breakout came. He was overruled by Hitler and relieved of his command, Von Rundstedt again taking over with specific instructions to hold on.

On July 25, the American Third Army and part of the First Army broke out at the western extremity of the Normandy pocket, swept round behind the German forces—pivoting on Caen, where the British held fast and moved slowly in conformity with the American sweep. The German Seventh and Fifth Panzer armies were rolled back against the Seine. All German resistance in northern and central France collapsed. The Allied forces swept forward, crossed the Seine, liberated Paris, and raced for the Rhine.

The landing of the Sixth Army Group in the south of France—the capture of Brussels and Antwerp—the airborne attempt to force a quick crossing of the Rhine at Arnhem, which threw us forward across two rivers but failed at the third—all these were but incidents leading up to the final assault on the western defenses of Germany.

The real brake upon our advance was the impossibility of continuing to supply our racing troops. All our supplies had to

come into France by sea. We were still dependent on the mined and battered port of Cherbourg plus a few smaller ports and artificial harbors. In every other major port from the mouth of the Loire right around to Calais, the Germans had left a garrison to resist to the end. The railway system of France and Belgium had been so shattered by our effective pre-invasion bombing that it could not operate at full capacity.

The Allied pause gave the Germans time to re-equip their shattered armies, to put new levies into the field. When the Allied advance was resumed, it ran almost immediately into stubborn opposition. We had to have a port nearer the decisive portion of the front. The clearing of the Scheldt to open Antwerp was therefore given major priority.

It was plain to the Germans as it was to our own command that the moment Antwerp was available we should begin the build-up for our last decisive offensive. The Germans had the choice of waiting for it, or trying a counterattack in the hope of rocking us off balance and delaying the end a little longer. Any sensible German government would have surrendered after the Normandy break-out. Hitler held on, bleeding Germany to death rather than to give in, and now he tried a last desperate gamble to delay the end. Antwerp was opened for Allied shipping on November 29.

On December 15, the Germans launched a desperate counterattack against the Allied center in the wooded region of the Ardennes.

This operation was Hitler's personal conception. Its purpose was no less than the recapture of Antwerp and the cutting off of the northern portion of the Allied armies. It resembled in this respect the German break-through on the Meuse in 1940. But the German army of 1944, hopelessly outclassed in the air and painfully scraping together, almost gallon by gallon, a reserve of gasoline for armored movement on the ground, was not the German army which had thundered across France four years before. A little ground was gained—a bulge driven in the Allied front under cover of lowering skies. Then the weather opened, the Allied air squadrons swept down, the Allied armies, perfectly handled, closed in from either side; the forlorn hope of the German army perished in the forests of the Ardennes. Hitler had expended his last reserve.

As the year ended, the western Allies were preparing for the great advance into the heart of Germany to join the oncoming Russians. There were rumors of an inner fortress, a "national citadel" in the Alps, where Hitler and his myrmidons would make their last stand and perish in Wagnerian flames.

6. 1944 THE YEAR OF DECISION: PACIFIC THEATER:

For Japan, 1943 had been a year of lost opportunities. The Japanese would not risk their main fleet to restore command of the seas around the Solomon Islands. They would not risk it for a full-scale attack on Hawaii. They deliberately assumed the strategic defensive. They permitted the United States to overtake and pass them in naval and air power.

On January 31, 1944, Admiral Nimitz thrust into the heart of the Marshall archipelago and captured the key atoll of Kwajalein.

The theory of the Japanese had been that these island groups were a defensive shield. They considered that with air bases on each island, a concentration of land-based air power could destroy any attacking force seeking to penetrate the Central Pacific. It never occurred to Japanese strategists that the American Navy was capable of building so many carriers that it could produce overwhelming air superiority over one island; and that having one island would give the Americans, also, land-based aircraft; and this process would be indefinitely repeated, so that the Japanese islands would serve as steppingstones westward across the Pacific.

Yet this was the pattern of war which Admiral Nimitz began to unfold, in giant strides, from Kwajalein to Eniwetok on the western edge of the Marshall group; and then to Saipan in the Marianas Islands, only 1,300 miles from Tokyo. On Saipan the Japanese garrison fought fiercely, but only a halfhearted attempt by the Japanese navy was made to relieve them. By the end of July, not only Saipan but the neighboring islands of Guam and Tinian were in American hands, and the base for long-range bombardment of Japan was established.

Thus, in six short months, the whole structure of Japan's mid-Pacific defenses had collapsed. The United States was within striking distance of the heart of the Japanese Empire.

Meanwhile, in the Southwest Pacific, General MacArthur's forces had advanced in a series of "bounds" westward to the tip of New Guinea, northward to the Admiralty Islands and New Britain. Behind them, like Nimitz, they left many isolated Japanese garrisons cut off, helpless to interfere. In Burma, a bold Allied advance had carried through to Myitkina. In China, the Japanese were able to accomplish nothing decisive, and the first bombs from our China-based long-range B-29's were already falling on Japanese cities.

On October 20, General MacArthur's troops began landing on Leyte, in the heart of the Philippine Islands. Then at last the

Japanese High Command took the gamble—a desperate gamble now—of throwing their main fleet into action. It was too late. Nimitz was supporting MacArthur in full strength. For three days, in a series of naval actions ranging over thousands of miles of sea, the struggle went on. When it was over, Japanese sea power had ceased to exist.

7. 1945 THE YEAR OF VICTORY:

The military events of the year 1945 are remembered in the minds of all Americans. This was the year of victory, the year in which the closing vise of the Allied armies of the west and the Russian armies of the east snapped shut on the remains of Nazi Germany; the year in which our sea and air power battered Japan into surrender with the final terrible climax of the atomic bomb attacks at Hiroshima and Nagasaki.

Viewed in retrospect, the details do not seem to matter, only that victory came. In Europe the Germans stuck to their Hitlerian pattern of holding ground to the last. They fought west of the Rhine instead of withdrawing behind it. They permitted two armies to be trapped in the triangle between the Saar and the Moselle, and thus opened a gap into the heart of Germany which they no longer had reserves to fill. They made a desperate defense of the Ruhr and allowed a whole army group there to be encircled. They flung counter-attack after counterattack against the Russians in reckless attempts to relieve besieged Budapest. These efforts were made

at the price of being unable to withdraw to their much-advertised "last stand" in the mountains of the south. From east and west the avenging armies moved in, at accelerating rates of progress and when the collapse came it was utterly complete. On May 7, 1945, at Rheims, the leaders of the Third Reich surrendered. Adolf Hitler already lay dead in the ruins of Berlin.

In the Pacific there was still some uncertainty as to when Japan would give up. Luzon was invaded in January and by July the Philippines were cleared of Japanese troops. The Marines advanced to Iwo Jima, steppingstone to Tokyo. In April, American forces landed on Okinawa and began a long and costly struggle for the last outpost to Japan.

The bombing attacks on the Japanese main islands increased in intensity. On August 6, came the terrible blow—the first atomic bomb used in warfare was dropped on the city of Hiroshima and wiped it from the land. Events then moved swiftly. Russia declared war on Japan and moved into Manchuria and Korea. The second atomic bomb dropped on Nagasaki. The leaders of Japan on August 14, declared their intention to surrender. On September 1, aboard the U. S. S. *Missouri*, in Tokyo Bay, the articles of surrender were signed.

The most terrible war in history, global in scope, ended with the surrender of the nations which had started it.

Important Conferences of World War II

Date	Place	Participants	Subject
August 9-12, 1941	U.S.S. <i>Augusta</i> at sea	Roosevelt-Churchill	Atlantic Charter
January 14, 1943	Casablanca	Roosevelt-Churchill	Unconditional surrender terms
August 17, 1943	Quebec, Canada	Roosevelt-Churchill	War planning
November 22, 1943	Cairo, Egypt	Roosevelt-Churchill-Generalissimo Chiang Kai-shek	Decision to strip Japan of all gains
December 4, 1943	Teheran, Persia	Roosevelt-Churchill-Stalin	Planning the European war
Sept. 11-16, 1944	Quebec, Canada	Roosevelt-Churchill-Eden and military staffs	Speed defeat of Japan and Germany
February 7, 1945	Yalta, Crimea	Roosevelt-Churchill-Stalin	Occupation of Germany and liberated people
April 25, 1945	San Francisco	Representatives of 46 nations	United Nations Charter
June 26, 1945	San Francisco	Representatives of 50 nations	World Security Charter
July 17, 1945	Potsdam, Germany	Truman-Attlee-Stalin	The Hard Peace terms

AMERICAN PACIFIC ISLANDS

Source: Encyclopaedia Britannica

The insular possessions of the United States in the Pacific Ocean are tiny sand or coral isles and islets which were of utterly no importance for many years, and then became overnight vital key spots in World War II against the Japanese. Two of them—Wake, where the Marines fought so valiantly and Midway, near where the Japanese met their first big sea defeat—have become famous names in American military history.

Midway Islands

The Midway group, 1,200 miles northwest of Hawaii, was discovered in 1859 and formally declared a U. S. possession in 1867. The component islands—Sand, with an area of 850 acres and Eastern, 328 acres—are surrounded by a coral reef five miles in diameter and by numerous small islets, giving the total group an area of 28 square miles. They first acquired importance in 1903 as a station on the trans-Pacific cable route, second in 1935 as a stop on Pan American's Pacific airline, and third as a U. S. naval and air base in the war against Japan.

One of the first big Japanese defeats of the war, and a defeat later to take on significance as one of the big strategic defeats of the war, occurred near Midway on June 4-6, 1942, when U. S. air and sea power destroyed or routed a large enemy task force headed east. As late as 1936, Midway's population was only 118, but it was a beehive of activity during the Pacific war, with large numbers of army, navy and air personnel stationed there.

Wake Island

Wake Island, consisting of the islets of Wake, Peale and Wilkes, was discovered by the British in 1796 and annexed by the United States in 1898. For many years it was neglected and uninhabited except for occasional visits by Japanese bird hunters. Gradually its four square miles situated 2,130 miles due west of Hawaii assumed great potential importance as an airline base in peacetime, as a naval base in wartime. The sand and coral group went under the Navy Department in 1934. By 1941

Wake was a key station on Pan American's trans-Pacific airline, was guarded by several hundred U. S. Marines, and was the scene of a sizeable Navy construction project. On Dec. 7, 1941, the Japanese attacked Wake Island with bombing planes, followed soon after by naval bombardment and attempts at landing. The resistance of the Marines, who held out until Dec. 23 against overwhelming odds and with no hope of relief, became an epic of heroism in U. S. military history.

Howland, Baker, Jarvis

Baker and Howland Islands are small coral atolls near the crossing of the Equator and the International Date Line, about 1,880 miles southwest of Hawaii. They were discovered by American whaling captains in the mid-19th Century. Baker is a mile long and 1,500 yards wide; Howland is two miles long and 750 yards wide.

Jarvis Island, about two miles long and a mile and a half wide, is 1,150 miles east of Howland and Baker, and slightly below the Equator.

Baker, Howland and Jarvis were colonized in 1935 by young Hawaiians who established radio and aerological stations there under the authority of the U. S. Department of the Interior, which took jurisdiction of the islands a year later.

Canton, Enderbury

Canton Island is about 1,850 miles southwest of Hawaii, and Enderbury lies thirty-two miles southeast of Canton. Canton is a narrow strip of land varying from fifty to 600 yards in width and enclosing a lagoon about nine miles long and three miles wide. Enderbury is an oblong, about three and a half by one and a half miles.

Since Canton is a good seaplane base, and Enderbury is regarded as a suitable base for land planes, these two fly specks on the map took on new importance with the progress of the air age. The United States and Britain disputed at length over their ownership and finally agreed on a plan of joint operation and control on Aug. 11, 1938.

The United States was not one of the Allies in the First World War. Since there was no common agreement on the objects to be attained by the war, the United States was an "associate" rather than an "ally."

United States Servicemen mailed three billion letters a year in World War II. Giving soldiers and sailors free mail cost the post office department about \$91,000,000 a year.

By July 1944, G. I. Joes were using scarcely a single weapon that was the same as those in use when Pearl Harbor was attacked.

Two early attempts to invade Japan were frustrated. Kublai Khan tried in vain to land on the Island of Kyushu in 1274. In 1281 he sent a larger expeditionary force of Mongols to the Japanese Islands but his armada was destroyed by a typhoon.—*Encyc. Brit.*



ORDER OF BATTLE

European Theater of Operations

(As of May 7, 1945)

(The order of battle of our allies is not shown below Army level, except when American forces were under their operational control.)

Source: Biennial Report of The Chief of Staff.

Unit	Commander	Location
Supreme Headquarters		
Allied Expeditionary Forces.....	General of the Army, Dwight D. Eisenhower.....	Main Headquarters, Versailles, France. Advance Hdqt. Reims, Fr.
Northern Group of Armies		
(21st Army Group).....	F/M Sir Bernard L. Montgomery.....	Suchteln, Germany.
First Canadian Army.....	Gen. H. D. G. Crerar.....	Holland.
Second British Army.....	Lt. Gen. Sir Miles C. Dempsey.....	Germany.
XVIII Corps (Airborne).....	Maj. Gen. M. B. Ridgway.....	Germany.
5th Armored Division.....	Maj. Gen. L. E. Oliver.....	Germany.
7th Armored Division.....	Maj. Gen. R. W. Hasbrouck.....	Germany.
82d Airborne Division.....	Maj. Gen. J. M. Gavin.....	Germany.
8th Infantry Division.....	Maj. Gen. B. E. Moore.....	Germany.
Central Group of Armies		
(12th Army Group).....	Gen. Omar N. Bradley.....	Wiesbaden, Germany.
Ninth Army.....	Lt. Gen. William H. Simpson.....	Braunschweig, Germany.
XIII Corps.....	Maj. Gen. A. C. Gillem, Jr.....	Germany.
35th Infantry Division.....	Maj. Gen. Paul W. Baade.....	Germany.
84th Infantry Division.....	Maj. Gen. A. R. Bolling.....	Germany.
102d Infantry Division.....	Maj. Gen. F. A. Keating.....	Germany.
XVI Corps.....	Maj. Gen. J. B. Anderson.....	Germany.
29th Infantry Division.....	Maj. Gen. C. H. Gerhardt.....	Germany.
75th Infantry Division.....	Maj. Gen. R. E. Porter.....	Germany.
79th Infantry Division.....	Maj. Gen. I. T. Wyche.....	Germany.
95th Infantry Division.....	Maj. Gen. H. L. Twaddle.....	Germany.
XIX Corps.....	Maj. Gen. R. S. McLain.....	Germany.
2d Armored Division.....	Maj. Gen. I. D. White.....	Germany.
8th Armored Division.....	Maj. Gen. J. M. Devine.....	Germany.
30th Infantry Division.....	Maj. Gen. L. S. Hobbs.....	Germany.
83d Infantry Division.....	Maj. Gen. R. C. Macon.....	Germany.
First Army.....	Gen. Courtney H. Hodges.....	Weimar, Germany.
78th Infantry Division.....	Maj. Gen. E. P. Parker, Jr.....	Germany.
VII Corps.....	Lt. Gen. J. L. Collins.....	Germany.
3d Armored Division.....	Brig. Gen. Doyle O. Hickey.....	Germany.
9th Infantry Division.....	Maj. Gen. L. A. Craig.....	Germany.
69th Infantry Division.....	Maj. Gen. Emil F. Reinhardt.....	Germany.
104th Infantry Division.....	Maj. Gen. Terry Allen.....	Germany.
VIII Corps.....	Maj. Gen. Troy H. Middleton.....	Germany.
6th Armored Division.....	Brig. Gen. George W. Read, Jr.....	Germany.
76th Infantry Division.....	Maj. Gen. William R. Schmidt.....	Germany.
87th Infantry Division.....	Maj. Gen. Frank L. Culin, Jr.....	Germany.
89th Infantry Division.....	Maj. Gen. Thomas D. Finley.....	Germany.
Third Army.....	Gen. George S. Patton, Jr.....	Erlangen, Germany.
4th Infantry Division.....	Maj. Gen. Harold W. Blakeley.....	Germany.
70th Infantry Division.....	Maj. Gen. A. J. Barnett.....	Germany.
III Corps.....	Maj. Gen. James A. Van Fleet.....	Germany.
14th Armored Division.....	Maj. Gen. Albert C. Smith.....	Germany.
99th Infantry Division.....	Maj. Gen. Walter E. Lauer.....	Germany.
V Corps.....	Maj. Gen. Clarence R. Huebner.....	Germany.
9th Armored Division.....	Maj. Gen. John W. Leonard.....	Germany.
16th Armored Division.....	Brig. Gen. John L. Pierce.....	Czechoslovakia.
1st Infantry Division.....	Maj. Gen. Clift Andrus.....	Czechoslovakia.
2d Infantry Division.....	Maj. Gen. Walter M. Robertson.....	Czechoslovakia.
97th Infantry Division.....	Brig. Gen. Milton B. Halsey.....	Czechoslovakia.
XII Corps.....	Maj. Gen. Stafford Leroy Irwin.....	Germany.
4th Armored Division.....	Maj. Gen. William M. Hodge.....	Czechoslovakia.
11th Armored Division.....	Maj. Gen. Holmes E. Dager.....	Austria.
5th Infantry Division.....	Maj. Gen. Albert E. Brown.....	Germany.
26th Infantry Division.....	Maj. Gen. Willard S. Paul.....	Austria.
90th Infantry Division.....	Maj. Gen. Herbert L. Earnest.....	Czechoslovakia.

Order of Battle—(cont.)

Unit	Commander	Location
XX Corps.....	Lt. Gen. Walton H. Walker.....	Germany.
13th Armored Division.....	Maj. Gen. John Milliken.....	Germany.
65th Infantry Division.....	Maj. Gen. Stanley E. Reinhardt.....	Austria.
71st Infantry Division.....	Maj. Gen. Willard G. Wyman.....	Austria.
80th Infantry Division.....	Maj. Gen. Horace L. McBride.....	Austria.
Fifteenth Army.....	Lt. Gen. Leonard T. Gerow.....	Bad Neunahr, Germany.
66th Infantry Division.....	Maj. Gen. Herman F. Kramer.....	France.
106th Infantry Division.....	Maj. Gen. Donald A. Stroh.....	France.
XXII Corps.....	Maj. Gen. Ernest N. Harmon.....	Germany.
17th Airborne Division.....	Maj. Gen. William M. Miley.....	Germany.
94th Infantry Division.....	Maj. Gen. Harry J. Malony.....	Germany.
XXIII Corps.....	Maj. Gen. Hugh J. Gaffey.....	Germany.
28th Infantry Division.....	Maj. Gen. Norman D. Cota.....	Germany.
Southern Group of Armies		
(6th Army Group).....	Gen. Jacob L. Devers.....	Heidelberg, Germany.
Seventh Army.....	Lt. Gen. Alexander M. Patch.....	Schwabischgemund, Germany.
12th Armored Division.....	Maj. Gen. Roderick R. Allen.....	Germany.
63d Infantry Division.....	Maj. Gen. Louis Hibbs.....	Germany.
45th Infantry Division.....	Maj. Gen. Robert T. Frederick.....	Germany.
100th Infantry Division.....	Maj. Gen. W. A. Burress.....	Germany.
XXI Corps.....	Maj. Gen. Frank W. Milburn.....	Germany.
101st Airborne Division.....	Maj. Gen. Maxwell D. Taylor.....	Germany.
36th Infantry Division.....	Maj. Gen. John E. Dahlquist.....	Austria.
XV Corps.....	Lt. Gen. Wade H. Haislip.....	Germany.
20th Armored Division.....	Maj. Gen. Orlando Ward.....	Germany.
3d Infantry Division.....	Maj. Gen. John W. O'Daniel.....	Germany.
42d Infantry Division.....	Maj. Gen. Harry J. Collins.....	Germany.
86th Infantry Division.....	Maj. Gen. Harris M. Melasky.....	Austria.
VI Corps.....	Maj. Gen. Edward H. Brooks.....	Germany.
10th Armored Division.....	Maj. Gen. William H. H. Morris, Jr.....	Austria.
44th Infantry Division.....	Maj. Gen. William F. Dean.....	Austria.
103d Infantry Division.....	Maj. Gen. Anthony C. McAuliffe.....	Austria.
First French Army.....	Gen. Jean J. de Lattre de Tassigny.....	Lindau, Germany.
SHAEF Reserve		
First Allied Airborne Army.....	Lt. Gen. Louis H. Brereton.....	Maison LaFitte, France.
13th Airborne Division.....	Maj. Gen. Elbridge G. Chapman, Jr.....	France.
U. S. Strategic Air Forces in Europe*		
Gen. Carl A. Spaatz.....		Rheims, France
Eighth Air Force.....	Lt. Gen. James H. Doolittle.....	High Wycombe, Bucks, England.
1st Air Division.....	Maj. Gen. Loward McC. Turner.....	England.
2d Air Division.....	Maj. Gen. Wm. E. Kepner.....	England.
3d Air Division.....	Maj. Gen. Earle E. Partridge.....	England.
Ninth Air Force.....	Lt. Gen. Hoyt S. Vandenberg.....	Wiesbaden, Germany.
IX Bomb Division.....	Maj. Gen. Samuel E. Anderson.....	Belgium.
IX Tactical Air Command.....	Maj. Gen. Elwood R. Quesada.....	Germany.
XIX Tactical Air Command.....	Maj. Gen. Otto P. Weyland.....	Germany.
XXIX Tactical Air Command.....	Brig. Gen. Richard E. Nugent.....	Germany.
First Tactical Air Force (Prov.)		
Maj. Gen. Robert M. Webster.....		Heidelberg, Germany.
XII Tactical Air Command.....	Brig. Gen. Glenn O. Barcus.....	Darmstadt, Germany.
1st French Air Command.....	Gen. de Brig. Paul Gerardot.....	Issenheim, France.
IX Troop Carrier Command.....	Maj. Gen. Paul L. Williams.....	Louvécienne, France.

*Exercised operational control over Fifteenth Air Force shown under Mediterranean Theater.

U. S. Army Strategic Air Forces (As of August 14, 1945)

Headquarters, U. S. Army Strategic Air Forces, Guam, Marianas Islands:

Commanding General.....	Gen. Carl Spaatz
Deputy Commander.....	Lt. Gen. B. McK. Giles
Chief of Staff.....	Maj. Gen. C. E. LeMay
Eighth Air Force, Okinawa, Ryukyus Islands:	
Commanding General.....	Lt. Gen. James H. Doolittle
Twentieth Air Force, Guam, Marianas Islands:	
Commanding General.....	Lt. Gen. Nathan F. Twining

Mediterranean Theater of Operations (As of May 2, 1945)

Unit	Commander	Location
Fifteenth Army Group	Gen. Mark W. Clark	Florence, Italy.
Fifth Army	Lt. Gen. Lucian K. Truscott	Verona, Italy.
II Corps	Lt. Gen. Geoffrey Keyes	Italy.
10th Mountain Division	Maj. Gen. George P. Hays	Italy.
85th Infantry Division	Maj. Gen. John B. Coulter	Italy.
88th Infantry Division	Maj. Gen. Paul W. Kendall	Italy.
IV Corps	Maj. Gen. Willis D. Crittenger	Italy.
1st Armored Division	Maj. Gen. Vernon E. Prichard	Italy.
34th Infantry Division	Maj. Gen. Charles L. Bolte	Italy.
92d Infantry Division	Maj. Gen. Edward M. Almond	Italy.
British Eighth Army	Lt. Gen. Sir R. L. McCreery	Italy.
91st Infantry Division	Maj. Gen. William G. Livesay	Italy.
U. S. Army Air Forces in MTO		
Twelfth Air Force	Lt. Gen. J. K. Cannon	Caserta, Italy.
XXII Tactical Air Command	Maj. Gen. B. W. Chidlaw	Florence, Italy.
	Brig. Gen. T. C. Darcy	Italy.
Fifteenth Air Force	Maj. Gen. N. F. Twining	Bari, Italy.
XV Fighter Command	Brig. Gen. D. C. Strother	Italy.

U. S. Army in the Pacific (As of August 14, 1945)

Unit	Commander	Location
General Headquarters, U. S. Army Forces in the Pacific	General of the Army, Douglas MacArthur	Manila, Luzon, Philippine Islands.
Sixth Army	Gen. Walter Krueger	Luzon, Philippine Islands.
40th Infantry Division	Brig. Gen. D. J. Myers	Panay, Philippine Islands.
11th Airborne Division	Maj. Gen. J. M. Swing	Luzon, Philippine Islands.
I Corps	Maj. Gen. I. P. Swift	Luzon, Philippine Islands.
25th Infantry Division	Maj. Gen. C. L. Mullins	Luzon, Philippine Islands.
33d Infantry Division	Maj. Gen. P. W. Clarkson	Luzon, Philippine Islands.
41st Infantry Division	Maj. Gen. J. A. Doe	Mindanao, Philippine Islands.
IX Corps	Maj. Gen. C. W. Ryder	Leyte, Philippine Islands.
77th Infantry Division	Maj. Gen. A. D. Bruce	Cebu, Philippine Islands.
81st Infantry Division	Maj. Gen. P. J. Mueller	Leyte, Philippine Islands.
XI Corps	Lt. Gen. C. P. Hall	Luzon, Philippine Islands.
43d Infantry Division	Maj. Gen. L. F. Wing	Luzon, Philippine Islands.
Americal Infantry Division	Maj. Gen. W. H. Arnold	Cebu, Philippine Islands.
1st Cavalry Division	Maj. Gen. W. C. Chase	Luzon, Philippine Islands.
Eighth Army	Lt. Gen. R. L. Eichelberger	Leyte, Philippine Islands.
93d Infantry Division	Maj. Gen. H. H. Johnson	Morotai Island, New Guinea, and Philippine Islands.
96th Infantry Division	Maj. Gen. James L. Bradley	Okinawa, Ryukyus Islands, Mindanao, and Philippine Islands.
X Corps	Maj. Gen. F. C. Sibert	Mindanao, Philippine Islands.
24th Infantry Division	Maj. Gen. R. B. Woodruff	Mindanao, Philippine Islands.
31st Infantry Division	Maj. Gen. C. A. Martin	Mindanao, Philippine Islands.
XIV Corps	Lt. Gen. O. W. Griswold	Luzon, Philippine Islands.
6th Infantry Division	Maj. Gen. C. E. Hurd	Luzon, Philippine Islands.
32d Infantry Division	Maj. Gen. W. H. Gill	Luzon, Philippine Islands.
37th Infantry Division	Maj. Gen. R. S. Beightler	Luzon, Philippine Islands.
38th Infantry Division	Maj. Gen. F. A. Irving	Luzon, Philippine Islands.
Tenth Army	Gen. J. W. Stilwell	Okinawa, Ryukyus Islands.
XXIV Corps	Lt. Gen. J. R. Hodge	Okinawa, Ryukyus Islands.
7th Infantry Division	Maj. Gen. A. V. Arnold	Okinawa, Ryukyus Islands.
27th Infantry Division	Maj. Gen. G. W. Griner, Jr.	Ie Shima and Okinawa, Ryukyus Islands.

U. S. Army in the Pacific—(cont.)

Unit	Commander	Location
U. S. Army Forces, Middle Pacific		
98th Infantry Division.....	Lt. Gen. R. C. Richardson, Jr..... Maj. Gen. A. M. Harper.....	Oahu, Hawaiian Islands. Oahu, Hawaiian Islands.
U. S. Army Forces, Western Pacific		
	Lt. Gen. W. D. Styer.....	Luzon, Philippine Islands.
Far East Air Forces		
Fifth Air Force.....	Gen. G. C. Kenney.....	Okinawa, Ryukyus Islands.
Seventh Air Force.....	Lt. Gen. E. C. Whitehead.....	Okinawa, Ryukyus, Islands.
Thirteenth Air Force.....	Brig. Gen. T. D. White..... Maj. Gen. P. B. Wurtsmith.....	Saipan, Marianas Islands. Leyte, Philippine Islands.

U. S. Forces in China Theater
(As of August 14, 1945)

Unit	Commander	Location
Headquarters, U. S. Forces, China Theater		
U. S. Army Air Forces.....	Lt. Gen. A. C. Wedemeyer.....	Chungking, China.
Tenth Air Force.....	Lt. Gen. G. E. Stratemeyer.....	Chungking, China.
Fourteenth Air Force.....	Maj. Gen. H. C. Davidson..... Maj. Gen. C. B. Stone, 3d.....	Liuchow, China. Kunming, China.

COST OF WARS TO U. S. TAXPAYERS

Source: Treasury Department.

War	Date	Direct cost	Pensions	Interest	Total
Revolutionary War.....	1775 to 1783	\$74,555,642 ¹	\$70,000,000 ²	.....	\$144,555,642 ³
War of 1812.....	1812 to 1815	133,700,000 ²	46,218,390 ⁴	.....	179,918,390 ³
War with Mexico.....	1846 to 1847	166,000,000 ²	61,653,106 ⁴	.....	227,653,106 ³
Civil War.....	1861 to 1865	.....	.....	.....	.....
U. S. Government.....	.....	4,474,954,364 ⁵	8,126,561,152.	\$3,054,000,000 ⁶	15,655,515,516.
Confederacy.....	.....	2,099,768,707 ⁴	7	.....	2,099,768,707 ⁴
Spanish-American War.....	1898.....	576,256,000	2,276,470,624 ⁴	49,815,000 ⁶	2,902,541,624
World War I.....	1917 to 1918	25,807,000,000 ⁹	6,391,000,000 ¹⁰	9,557,000,000 ¹¹	41,755,000,000
World War II.....	1941 to 1945	330,500,000,000 ¹²	4,128,608,870 ¹³	15,150,000,000 ¹³	349,778,608,870 ¹⁴
Total.....	.....	363,832,234,713	21,100,512,142	27,810,815,000	412,743,561,855

¹Foreign loans, \$10,098,706; national and state war debts, \$64,456,936.²Estimated.³Incomplete figures; actual cost almost certainly much higher.⁴As of Feb. 28, 1946.⁵Including \$468,954,364 expended by the several states.⁶Confederate Treasury figures for the period from February 1861 to October 1, 1864, only, expressed in Confederate currency, which depreciated by October 1, 1864, to a ratio with gold of 26 to 1. Does not include expenditures by the several states of the Confederacy.⁷No estimate available of pensions paid to Confederate veterans by Southern states.⁸As of 1925.⁹Including \$88,000,000 of payments under the War Claims Act.¹⁰Total cost of Veterans Administration to June 30, 1934.¹¹To June 30, 1934.¹²War expenditures from July 1, 1940, to June 30, 1945, \$281,500,000,000; estimated expenditures for fiscal year ending June 30, 1946, \$49,000,000,000.¹³Includes estimated expenditures for fiscal year ending June 30, 1946.¹⁴The total cost of World War II to all participants was estimated as of March 10, 1946, at \$1,352,000,000,000 (1 trillion 352 billion dollars). Source: Bank of International Settlements, as reported in the N. Y. Herald Tribune.

Casualties of U. S. Wars for Army, Navy, and Marine Corps, 1775 to 1945

Source: U. S. Army, U. S. Navy, and U. S. Marine Corps.

Wars	Branch of service	Numbers engaged	Killed in action	Died of wounds	Other deaths	Total deaths	Missing	Wounds not mortal	Total casualties
Revolution War 1775 to 1783	Army	(¹)	.....	.....	.....	4,044 ²	2,124	6,004	12,172
	Navy	.....	.....	.....	.....	.....	.....	.....	.....
	Marines	.....	.....	.....	.....	.....	.....	.....	.....
	Total	.....	.....	.....	.....	4,044	2,124	6,004	12,172
War of 1812 1812 to 1815	Army	528,274 ³	.....	.....	.....	1,950 ²	.....	4,000	5,950
	Navy	6,773	265	.....	.....	265	.....	439	704
	Marines	1,155	45	.....	.....	45	.....	66	111
	Total	536,202	310	.....	.....	2,260	.....	4,505	6,765
War with Mexico 1846 to 1847	Army	116,597	1,044	505	11,395	12,944	.....	3,393	16,337
	Navy	11,129	1	.....	.....	1	.....	3	4
	Marines	2,270	11	.....	.....	11	.....	47	58
	Total	129,996	1,056	505	11,395	12,956	.....	3,443	16,399
Civil War 1861 to 1865	Army	2,128,948	67,058	43,012	249,458	359,528 ⁴	.....	280,040 ⁵	639,568
	Navy	57,841 ⁶	2,112	.....	2,411	4,523	.....	1,710	6,233
	Marines	3,255 ⁷	108	.....	272	380	40	131	551 ⁷
	Total	2,190,044	69,278	43,012	252,141	364,431	40	281,881	646,352
Spanish-American 1898	Army	280,564	498	202	5,772	6,472	.....	2,974	9,446
	Navy	22,875	10	.....	.....	10	.....	47	57
	Marines	3,321	6	.....	.....	6	.....	21	27 ⁸
	Total	306,760	514	202	5,772	6,488	.....	3,042	9,530
Military Expeditions ⁹ 1899 to 1916	Army	131,468 ¹⁰	863	253	3,269	4,385	.....	3,007	7,392
	Navy	.....	.....	.....	.....	.....	.....	.....	.....
	Marines	.....	.....	.....	.....	.....	.....	.....	.....
	Total	131,468	863	253	3,269	4,385	.....	3,007	7,392
World War I 1917 to 1918	Army	4,057,101	37,568	12,942	69,446	119,956	.....	193,663 ¹¹	313,619
	Navy	473,262 ¹²	59	.....	6,975	7,034	.....	292	7,326
	Marines	78,827	2,461	.....	823	3,284	.....	9,505	12,789
	Total	4,609,190	40,088	12,942	77,244	130,274	.....	203,460	333,734
World War II 1941 to 1945	Army	10,600,000	176,432	25,493	105,629	307,554	1,424	572,027	881,005
	Navy	3,963,000 ¹³	36,762	.....	24,414	61,176	631	40,746	102,553
	Marines	575,424 ¹⁴	19,275	.....	4,752	24,027	124	60,661	84,812
	Total	15,136,424	232,469	25,493	134,795	392,757	2,179	673,434	1,068,370 ¹⁵
Total War Casualties 1775 to 1945 (170 years)	Army	17,842,952	283,463	82,407	444,969	816,833	3,548	1,065,108	1,885,489
	Navy	4,534,880	39,209	.....	33,800	73,009	631	43,237	116,877
	Marines	662,252	21,906	.....	5,847	27,753	164	70,431	98,348
	Total	23,040,084	344,578	82,407	484,616	917,595	4,343	1,178,776	2,100,714

¹Greatest strength of Continental Army was about 35,000, November 1778.

²Total number undoubtedly much larger, since records were incomplete.

³Represents enlistments; hence in excess of actual number of troops since reenlistments were counted as term of service.

⁴Actual deaths larger since records of Confederates far from complete.

⁵Estimated on Union records but number believed to be considerably larger.

⁶Based on highest total for year 1865.

⁷Excludes 999 Confederate Marines of which 527 were casualties.

⁸Excludes 28 killed on the U. S. S. Maine.

⁹Philippine Insurrection, 1899 to 1902; Cuban pacification, 1906 to 1909; China Relief Expedition, 1900 to 1901; Mexican Border, 1911 to 1916; Punitive Expedition, 1916.

¹⁰Approximately. Includes National Guard in Federal Service during Mexican border incidents.

¹¹Number incurred among 182,674 individuals, many having been wounded more than once.

¹²This figure includes those who served in the Nurse Corps of the U. S. Navy but does not include commissioned and warrant officers who were serving in the Regular Navy and Naval Reserve Force.

¹³Includes 119,300 WAVE's and Nurses.

¹⁴Does not include 22,758 Women Marines.

¹⁵Total casualty figures do not include unaccounted-for prisoners of war.

An appalling number of lives were lost during the first part of World War II because many servicemen of the warring nations did not know how to swim. As a re-

sult, efforts have been made in several countries to introduce compulsory swimming courses in all schools and colleges.—*Encyc. Brit.*

Killed in Battle—Wars Compared

Source: Biennial Report of the Chief of Staff of the United States Army.

Wars	Numbers of months duration	Total battle deaths	Average battle deaths per month
American Revolution	80	4,044	50
War of 1812	30	1,877	62
Mexican War	20	1,721	86
Civil War (Union losses)	48	110,070	2,293
Civil War (Confederate losses)	48	74,524	1,552
Spanish-American War	4	345	86
World War I	19	50,510	2,658
World War II	44	201,367	4,576

Casualties: European Theater of Operations (does not include Italy)

Assignment	Number of casualties	Percentage of casualties
Theater troops	1,094	.18
Army group, army and corps troops	60,998	10.35
Infantry divisions	392,990	66.69
Armored divisions	62,417	10.60
Airborne divisions	22,008	3.73
Total combat divisions	477,415	81.02
Total field forces	539,507	91.55
Troops under air commanders	1,669	.29
Strategic air forces	37,500	6.36
Tactical air forces	6,346	1.08
Total air forces	45,545	7.73
Communications zone troops	4,217	.72
Total	589,269	100.00

Japanese Losses on Eastern Battlefronts

Theater	Battle dead	Permanently disabled	Captured	Total
Southern Pacific	684,000	69,000	19,806	772,806
Central Pacific	273,000	6,000	17,472	296,472
India-Burma	128,000	38,000	3,097	169,097
China	126,000	126,000	1,059	253,059
Aleutians	8,000	1,000	30	9,030
Total	1,219,000	240,000	41,464	1,500,464

German and Italian Casualties

Theater	Battle dead	Permanently disabled	Captured	Total
Tunisia	19,600	19,000	130,000	168,600
Sicily	5,000	2,000	7,100	14,100
Italy	86,000	15,000	357,089	458,089
Western Front	263,000	49,000	7,614,794*	7,926,794
Total	373,600	85,000	8,108,983*	8,567,583

*Includes 3,404,949 disarmed enemy forces.

SENIOR ARMY AND NAVY COMMANDERS

Source: Army and Navy Journal.

WAR DEPARTMENT AND ARMY

Secretary of War—Robert P. Patterson.
 Under Secretary of War—Kenneth Royall.
 Assistant Secretary of War—Howard C. Petersen.
 Assistant Secretary of War, Air—W. Stuart Symington.
 Chief of Staff—General of the Army Dwight D. Eisenhower.
 Deputy Chief of Staff—General Thomas T. Handy.
 Commanding General, Army Air Forces—General Carl A. Spaatz.
 Deputy Commander, AAF, and Chief of Air Staff—Lt. Gen. Ira C. Eaker.
 Commanding General, Army Ground Forces—General Jacob L. Devers.
 Commanding General, Army Service Forces—Lt. Gen. LeRoy Lutes.
 Deputy Commanding General, ASF, and Chief of Staff—Maj. Gen. Daniel C. Noce.

THEATER COMMANDERS

J. S. Forces, European Theater—General Joseph T. McNarney.
 J. S. Air Forces in Europe—Maj. Gen. Idwal H. Edwards.
 Office of Military Government for Germany—Lt. Gen. Lucius D. Clay.
 Commander of Allied Forces in Japan—General of the Army Douglas MacArthur.
 J. S. A. Forces, Middle Pacific—Maj. Gen. George F. Moore.
 J. S. A. Forces, Western Pacific—Lt. Gen. Wilheld D. Styer.
 Pacific Air Command—Lt. Gen. Enis C. Whitehead.
 J. S. Forces, China Theater—no replacement announced.
 J. S. Forces, India-Burma Theater—Maj. Gen. T. A. Terry.
 J. S. Forces in Mediterranean Theater—Lt. Gen. J. C. H. Lee.
 J. S. Forces in African-Middle East Theater—Maj. Gen. Benjamin F. Giles.

ARMY COMMANDERS

First Army—General Courtney H. Hodges.
 Second Army—Lt. Gen. Albert C. Wedemeyer.
 Third Army—Lt. Gen. Geoffrey Keyes.
 Fourth Army—General Jonathan M. Wainwright.
 Fifth Army—Lt. Gen. Walton H. Walker.
 Sixth Army—No replacement announced.
 Seventh Army—Lt. Gen. Oscar W. Griswold.
 Eighth Army—Lt. Gen. Robert L. Eichelberger.

AIR COMMANDS

Strategic Air Command—General George C. Kenney.
 Tactical Air Command—Maj. Gen. E. R. Quesada.
 Air Defense Command—Lt. Gen. George E. Stratemeyer.
 Air Materiel Command—Lt. Gen. Nathan F. Twining.
 Training Command—Lt. Gen. J. K. Cannon.
 Air Transport Command—Lt. Gen. Harold L. George.
 Air University—Maj. Gen. Muir S. Fairchild.
 Air Proving Ground Command—Maj. Gen. Donald Wilson.

NAVY DEPARTMENT AND FLEET

Secretary of the Navy—James Forrestal.
 Assistant Secretary of the Navy—W. John Kenney.
 Assistant Secretary of the Navy, Air—John L. Sullivan.
 Chief of Naval Operations—Fleet Admiral Chester W. Nimitz.
 Vice Chief of Naval Operations—Vice Adm. D. C. Ramsey.
 Naval Inspector General—Adm. C. P. Snyder (Ret.)
 General Planning Group—Rear Adm. George C. Dyer.
 Deputy CNO (Personnel)—Vice Adm. L. E. Denfeld.
 Deputy CNO (Administration)—Vice Adm. R. L. Connolly.
 Deputy CNO (Operations)—Vice Adm. F. P. Sherman.
 Deputy CNO (Logistics)—Rear Adm. Robert B. Carney.
 Deputy CNO (Air)—Vice Adm. A. W. Radford.
 Deputy CNO (Special Weapons)—Vice Adm. W. H. P. Blandy.

FLEET COMMANDERS

Pacific—Adm. John H. Towers.
 Atlantic—Adm. Jonas H. Ingram.
 Third—Vice Adm. Howard F. Kingman.
 Fifth—Vice Adm. Alfred E. Montgomery.
 Seventh—Vice Adm. Charles M. Cooke, Jr.
 Eighth—Adm. Marc A. Mitscher.
 Tenth—Vice Adm. Bernhard H. Bieri.

NAVAL FORCES COMMANDERS

Europe—Admiral Richard L. Connolly.
 Japan—Vice Adm. Robert M. Griffin.
 Germany—Rear Adm. Roscoe E. Schuirmann.
 Mediterranean—Rear Adm. Jules James.

SEA FRONTIER COMMANDERS

Eastern—Adm. Thomas C. Kinkaid.
 Western—Adm. Richard S. Edwards.
 Caribbean—Vice Adm. William R. Munroe.
 Gulf—Rear Adm. John F. Shafroth, Jr.
 Hawaiian—Rear Adm. Edward W. Hanson
 (Acting).
 Alaskan—Rear Adm. Freeland A. Daubin.
 Philippine—Vice Adm. James L. Kauffman.

MARINE CORPS

Commandant—General A. A. Vandegrift.
 Asst. Commandant—Maj. Gen. Lemuel C.
 Shepherd.
 Commander, Fleet Marine Force, Pacific—
 Maj. Gen. Allen T. Turnage.

COAST GUARD

Commandant—Admiral Joseph F. Farley.
 Asst. Comdt.—Rear Admiral Merlin O'Neil.

DISPOSITION OF U. S. NAVY

Source: Annual Report of the Secretary of the Navy to the President, January 10, 1946.

	Battleships	Carriers	Escort carriers	Cruisers	Destroyers	Destroyer escorts	Submarines
Pacific Fleet							
Active	2	9	9	20	81	16	39
Reserve	3	2	—	8	18	—	—
Atlantic Fleet							
Active	2	4	4	8	54	20	51
Reserve	3	3	—	10	22	4	—
Inactive Reserve	7	18	62	31	178	254	101

NAVAL STATIONS OUTSIDE CONTINENTAL UNITED STATES

Balboa, Canal Zone	Tutuila, Samoa
Guantanamo Bay, Cuba	Coco Solo, Canal Zone
St. Thomas, Virgin Islands	Roosevelt Roads, Puerto Rico
	Samar, Philippine Islands

NAVAL OPERATING BASES OUTSIDE CONTINENTAL UNITED STATES*

Adak, Alaska	Argentia, Newfoundland
Balboa, Canal Zone	Coco Solo, Canal Zone
Bermuda, British West Indies	Dutch Harbor, Alaska
Eniwetok, Marshall Islands	Guam, Marianas Islands
Guantanamo, Cuba	Kodiak, Alaska
Kwajalein, Marshall Islands	Manila, Philippine Islands
Midway Island	Okinawa, Ryukyu Islands
Palermo, Sicily	Reykjavik, Iceland
Rio de Janeiro, Brazil	Saipan, Marianas Islands
Samar, Philippine Islands	Trinidad, British West Indies

NAVAL AIR STATIONS OR BASES OUTSIDE CONTINENTAL UNITED STATES*

Adak, Alaska	Agana, Guam, Marianas
Attu, Alaska	Barbers Point, Hawaii
Ebeye, Marshall Islands	Eniwetok, Marshall Islands
Guantanamo, Cuba	Hilo Field, Hawaii
Johnston Island, S. Pacific	Kagman, Saipan, Marianas
Kahului, Hawaii	Kaneohe Bay, Hawaii
Katchin Hanto, Okinawa	Keehl Lagoon, Hawaii
Kobler, Saipan, Marianas	Kodiak, Alaska
Kwajalein, Marshall Islands	Majuro Atoll, Marshall Islands
Manus, Admiralty Islands	Marpi, Saipan, Marianas
Midway Island	Okinawa, Ryukyu Islands
Palmyra Island, S. Pacific	Pearl Harbor, Hawaii
Port Lyautey, French Morocco	Palawan, Philippine Islands
Puunene, Maui, Hawaii	Roi, Marshall Islands
Saipan, Marianas	Samar, Philippine Islands
Sangley Point, Luzon, Philippines	San Juan, Puerto Rico
Sitka, Alaska	Leyte, Philippine Islands
Trinidad, British West Indies	Wake Island
	Yonabaru, Okinawa, Ryukyu Islands

*Many of these bases are also used by U. S. Army and Air Forces.

Inductions by Months, 1940 to 1945

Source: Director, Selective Service System.

Month	Continental United States	Territories				Total, United States and territories
		Alaska	Hawaii	Puerto Rico	Virgin Islands	
October 1940 to De- cember 31, 1941	943,590	488	1,677	5,093	0	950,848
1942						
January	87,837	81	786	0	0	88,704
February	159,797	67	0	0	0	159,864
March	184,489	229	0	2,099	0	186,817
April	211,983	165	0	99	0	212,247
May	185,333	66	674	812	0	186,885
June	211,343	76	332	34	0	211,785
July	270,291	82	0	260	0	270,633
August	312,518	64	1	185	0	312,768
September	323,787	88	110	806	0	324,791
October	384,693	127	6	709	0	385,535
November	366,634	153	14	295	0	367,096
December	334,656	83	0	8	0	334,747
Totals	3,033,361	1,281	1,923	5,307	0	3,041,872
1943						
January	387,485	118	38	2	0	387,643
February	406,175	112	4	0	0	406,291
March	405,737	76	0	0	0	405,813
April	281,576	36	2,705	1	0	284,318
May	270,888	40	7	3,270	0	274,205
June	278,635	111	867	3,847	0	283,460
July	281,871	147	55	1,820	0	283,893
August	219,510	104	49	1,103	0	220,766
September	208,988	36	62	2,504	0	211,590
October	196,703	49	57	1,552	0	198,361
November	192,423	19	38	1,177	0	193,657
December	193,979	11	36	717	0	194,743
Totals	3,323,970	859	3,918	15,993	0	3,344,740
1944						
January	201,273	27	377	37	0	201,714
February	78,404	4	61	616	0	79,085
March	233,752	47	56	242	0	234,097
April	216,808	55	477	2,264	0	219,604
May	185,189	156	625	1,309	0	187,279
June	152,570	57	776	1,090	212	154,705
July	117,888	87	942	859	38	119,814
August	104,072	64	1,080	1,094	50	106,360
September	81,292	17	1,141	796	200	83,446
October	79,569	89	778	1,009	0	81,445
November	70,020	26	913	1,311	0	72,270
December	71,105	9	83	1,476	0	72,673
Totals	1,591,942	638	7,309	12,103	500	1,612,492
1945						
January	92,635	0	769	1,423	0	94,827
February	100,487	0	1,005	2,229	0	103,721
March	112,440	7	1,394	1,790	0	115,631
April	112,676	11	1,097	1,051	70	114,905
May ¹	106,854	76	1,130	585	22	108,667
June	106,081	33	1,191	958	96	108,359
July	93,012	38	1,124	912	82	95,168
August	68,897	0	1,125	1,500	37	71,559
September ²	53,259	34	1,103	211	0	54,607
October	41,476	6	627	176	0	42,285
November	35,849	11	1,183	0	0	37,043
December	22,196	0	1,433	83	0	23,712
Totals	945,862	216	13,181	9,918	307	970,484
October 1940 to De- cember 31, 1945	9,838,725	3,482	28,008	49,414	807	9,920,436

¹V-E Day, May 8, 1945.

²V-J Day, September 2, 1945.

SELECTIVE SERVICE IN WORLD WAR II

By Major General Lewis B. Hershey

Director, Selective Service System

When the Japanese attacked Pearl Harbor in December 1941, the Selective Service System had been functioning smoothly for 13 months. Out of the approximately 198,000 personnel of the Selective Service System at the end of the first quarter of 1946, only 15,200 were paid employees. Those serving without compensation include the local and appeal board members, government appeal agents, and examining physicians and dentists. Fifty-six percent of them served continuously throughout the period of hostilities.

From October 16, 1940, to August 31, 1945, more than 31,000,000 men under the age of 45 years were registered and classified, and more than 17,300,000 registrants were examined or forwarded to the armed forces for examination.

It is now apparent that successful operation of Selective Service was due in a large degree to its policy of decentralization. The 6,443 local boards were made up of three or more local citizens. Appeal boards were set up in each State, and the decisions of these boards on questions of classification were final except in unusual cases involving occupation or hardship, which were subject to Presidential appeal.

State headquarters supervised the work of the local board under the direction of the state director, who was appointed by the President on the recommendation of the governor.

The enactment of the Selective Service Act in 1940 marked the first peacetime conscription in United States history. In its original form the act provided for one year of military training for men 21 through 35 years of age. Not more than 900,000 were to be in training at one time. In August 1941, men above 27 years of age were relieved from liability for training and service.

The act barred all bounties and substi-

tutes; exempted only clergymen, divinity students, high-ranking public officials, and conscientious objectors; and authorized deferments at the discretion of the President.

Although age was the most important factor in determining who should register, the selection of men for induction or deferment was, until 1944, largely dependent on marital status and occupation. Issues which proved most controversial were those involving the age limit for induction, induction of fathers, enlistments, and deferment of farmers and students.

Recruiting by the armed forces of men 18 through 37 years of age was stopped on December 5, 1942. Before that date all men inducted were enrolled in the Army. The new order provided men for the Navy, Marine Corps and Coast Guard as well. This was done to provide a closer control over manpower in view of the heavy demands of the armed forces, industry, and agriculture.

On August 15, 1945, after the surrender of Japan, the President ordered the induction of men over 26 years of age. A few days later he issued an executive order permitting the recruiting of men 18 through 37 years of age.

By 1946 most men between the ages of 20 and 30 had already served or were still in service, or were fathers, or had already been rejected by the armed forces, or were otherwise unavailable for service. There were perhaps some 72,000 men in the 20-to-30 group who might be inducted, and probably half of these would be rejected. Thus Selective Service found itself, less than a year after the end of the greatest war in history, with peace treaties not yet signed and the international situation far from stabilized, faced on the one hand with continuing needs of the armed forces for men and on the other hand with a virtually depleted source of manpower. The man-

Classification of Registrants, Ages 18 through 25

(Numbers in thousands)

	Number	Percent	18	19-21	22-25
Total living registrants	9,257	100.0	1,047	3,329	4,881
I-C	6,619	71.5	466	2,372	3,781
IV-F	1,388	15.0	184	562	642
I-A, I-A-O, I-A(B)	385	4.2	264	79	42
Unclassified	135	1.4	54	40	41
II-A	87	0.9	20	36	31
II-A(L) U II-A(F)	175	1.9	6	66	103
II-C	193	2.1	30	82	81
II-C(L) U II-C(F)	128	1.4	9	59	60
III-A	79	0.9	6	11	62
III-D	12	0.1	2	5	5
I-G, IV-B, C, D, E, & Obsolete	56	0.6	6	17	33

power picture, in the spring of 1946, is shown in the preceding table.

When the program for manpower mobilization was undertaken, it was not expected that the percentage of mentally or physically unfit would be as large as it proved. By August 31, 1945, of the 17,300,000 registrants between the ages of 18 and 45 examined, over 5,750,000 had been found unfit for military service.

A study of 20 percent of the 9 million examinations made between April 1942 and December 1943 showed that rejections ranged from 31.4 percent for January 1943 to 46.9 percent for December 1943. Rejection rates for whites were consistently lower than those for Negroes.

The highest rejection rates were for domestic service workers, emergency workers, the unemployed, and farmers and farm managers. Students had the lowest rejection rates. The principal causes for rejections of white registrants examined during the entire period covered by the study were (in order of magnitude) mental disease, musculoskeletal defects, hernia, cardiovascular defects, educational and mental deficiency, eye defects, neurological

defects, ear defects, tuberculosis and syphilis.

Of the registrants examined, 36.9 percent were reported to be free of physical defects. As age increased, the proportion of men with "no defects" decreased. Rejection rates varied considerable between and within regions. The highest rejection rates were found in the south, and the lowest rates in the northwest states.

Unlike previous draft legislation, the Selective Training and Service Act of 1940 recognized the principle that, when a country calls upon its citizens to leave their jobs and homes to bear arms in the national defense, the country is obliged to protect the citizen-soldiers' private interests so that they may return to civilian life with a minimum of loss. The act contains provisions which require employers, under certain conditions, to reinstate the discharged veteran to the job he left, or to a comparable one, without loss of any benefit to which he would have been entitled had he remained at his employment.

To be eligible for reinstatement the veteran must have received a certificate of satisfactory service, must still be qualified to perform the duties of his position, and must apply for reinstatement within 90 days of his discharge. Reinstatement is not compulsory if the employer's circumstances have so changed as to make it impossible or unreasonable for him to reemploy the veteran. The reemployment provisions are applicable only to men who worked for a private employer or the Federal Government, who held a position which was other than temporary, and who left the position for the purpose of entering the armed forces. Supplementary legislation extended similar reemployment rights to veterans of the United States Public Health Service and the Merchant Marine. The Merchant Marine veteran, however, must have received a certificate showing the completion of a "period of substantially continuous service" and must apply for reinstatement to his old position within 40 days after release from service.

After he is restored to his position, the veteran is entitled to the following additional rights: (1) He shall be considered as having been on furlough or leave of absence during his period of service; (2) He shall be entitled to participate in insurance or other benefits offered by the employer pursuant to established rules and practices relating to employees on furlough or leave of absence in effect with the employer at the time such person entered into such service and (3) He shall not be discharged from such position without cause within one year after such restoration.

Under the provisions of the act, one of the functions of the Selective Service Sys-

Rejection Rates

by year of birth and race, per 100 registrants examined Sept. 1942-June 1943

Age in 1943	Local board and induction station		
All ages	Total	White	Negro
18	36.4	33.6	52.9
19	27.6	26.3	45.4
20	25.2	23.2	43.7
21	25.5	23.5	42.4
22	26.2	24.0	38.8
23	27.6	25.3	37.7
24	31.0	28.6	42.8
25	37.4	34.0	53.1
26	37.0	33.8	54.3
27	38.0	35.0	55.5
28	39.4	36.2	57.5
29	40.3	37.1	59.8
30	41.8	38.6	59.1
31	43.5	40.3	60.5
32	45.4	42.0	62.8
33	46.9	43.4	64.6
34	48.9	45.7	64.9
35	50.7	47.9	66.2
36	52.0	49.2	68.0
37	54.7	51.8	69.1
38	55.4	53.0	69.4
39	59.1	56.0	73.0
40	54.1	50.8	68.8
41	54.4	51.4	68.8
42	57.4	54.0	71.5
43	59.6	57.2	73.7
44	61.3	58.0	73.5
45	63.2	61.2	75.4
46	66.3	64.4	77.4
47	67.5	65.2	80.8

tem at the local board, state, and national levels, has been to assist in reemployment of the discharged veteran. This function began with the first discharges of men from the armed forces shortly after mobilization got under way and increased in tempo at the end of the war, when the men began pouring out of separation centers to find their places in civilian life.

Veterans' assistance begins with the local boards, the personnel of which has been supplemented by the appointment of reemployment committeemen—local citizens who serve without compensation. When a veteran goes to any local board for reemployment assistance, the committeeman, or a local board member, will confer personally with the employer, using every means possible to reach a solution satisfactory to the veteran within the rights established by the act. If the board is unable to obtain an amicable adjustment, the case is referred to the state director of Selective Service. The state director, acting through a veterans personnel division of the state headquarters, will undertake further negotiation. In the event that

all means for settlement fail, the case is referred, upon consent of the veteran, to the United States Attorney for legal action. The veteran is entitled to bring suit in the United States District Court, with the assistance of the United States Attorney, or he may bring suit by his own counsel. No fees or court costs are assessed against the veteran. The district courts are given jurisdiction specifically to require private employers to comply with the reemployment provisions of the law and, as an incident thereto, to compensate the veteran for any loss of wages.

As a matter of actual practice, by the end of March 1946, fewer than 300 cases required action by United States Attorneys. Thousands of reemployment cases had been satisfactorily settled by friendly and informal intervention on behalf of the veteran by a local board.

In September 1945, the Selective Service System released, in addition to the statutory provisions and procedures, a comprehensive handbook for the guidance of veterans and individuals and agencies concerned with their reemployment.

U. S. Army Insignia, Grade, Pay, and Allowances for Officers

Source: War Department Bureau of Public Relations.

Insignia	Grade	Annual base pay	Allowances			
			Monthly rental with dependents	Monthly subsistence with no dependents	Monthly subsistence with dependents	Monthly subsistence with no dependents
(1)			(2)	(2)		
	General of the Armies of the United States	\$13,500				
Five stars	General of the Army	8,800 ³	\$120	\$105	\$42	\$21
Four stars	General	8,800 ⁴	120	105	42	21
Three stars	Lieutenant General	8,800 ⁵	120	105	42	21
Two stars	Major General	8,800	120	105	42	21
One star	Brigadier General	6,600	120	105	42	21
Silver eagle	Colonel	4,400	120	105	42	21
Silver maple leaf	Lieutenant Colonel	3,850	120	105	63	21
Gold maple leaf	Major	3,300	105	90	63	21
Two silver bars	Captain	2,760	90	75	42	21
One silver bar	First Lieutenant	2,400	75	60	42	21
One gold bar	Second Lieutenant	2,160	60	45	42	21
Gold bar with rounded ends, brown enamel top, longitudinal center of gold (3/4" wide x 1" long)	Chief Warrant Officer (appointed by the Secretary of War)	3,300	105	90	63	21
Same	Same	2,760	90	75	42	21
Same	Chief Warrant Officer	2,520	75	60	42	21
Same as chief warrant officer but with latitudinal center of gold	Warrant Officer (Junior Grade)	2,160	60	45	42	21
Gold bar, with rounded ends, blue enamel top, with latitudinal center of gold	Flight Officer	2,160	60	45	42	21

¹Although General Pershing, as General of the Armies of the United States, may wear as many stars as he desires, he has never worn more than four.

²Allowances fixed by the President: suitable quarters in kind or, in lieu thereof, commutation of quarters at rate of \$6,500 per year; necessary fuel and light for quarters in kind or, in lieu thereof, commutation of fuel and light at rate of \$1,500 per year.

³Plus a personal money allowance of \$5,000 per year.

⁴Plus a personal money allowance of \$2,200 per year.

⁵Plus a personal money allowance of \$500 per year.

U. S. Army Insignia, Grade, and Pay for Enlisted Men

Source: War Department Bureau of Public Relations.

Insignia	Grade	Monthly base pay	Insignia	Grade	Monthly base pay
	1st Grade			4th Grade	
3 chevrons and an arc of 3 bars	Master Sergeant	\$165	3 chevrons	Sergeant	100
3 chevrons and an arc of 3 bars with hollow lozenge on blue field between 3 chevrons and an arc of 3 bars below	First Sergeant	165	3 chevrons with letter T below chevrons	Technician Fourth Grade	100
				5th Grade	
	2d Grade		2 chevrons	Corporal	90
			2 chevrons with letter T below chevrons	Technician Fifth Grade	90
3 chevrons and an arc of 2 bars	Technical Sergeant	135		6th Grade	
	3d Grade		1 chevron	Private First Class	80
3 chevrons and an arc of 1 bar	Staff Sergeant	115		7th Grade	
3 chevrons and an arc of 1 bar with letter T on blue background	Technician Third Grade	115	No insignia	Private	75

Longevity Allowances: General officers serving in the grade of Brigadier General and above do not receive longevity allowances. All other officers and enlisted men are entitled to an increase of 5 per centum of the base pay of their period for each three years of service up to 30 years.

Foreign Service or Sea Duty: The base pay of any commissioned officer shall be increased by 10 per centum for any period of service while on sea duty or duty in any place beyond the continental limits of the United States or in Alaska. Warrant officers and enlisted men receive an increase of 20 per centum.

Flying Pay: Officers and enlisted men shall receive an increase of 50 per centum of their pay when by orders of competent authority they are required to participate regularly and frequently in aerial flights.

Women's Army Corps: The pay of officers and enlisted women is the same as that for male officers and enlisted men of the Army of the United States in comparable grades.

U. S. Navy Grade, Classification and Monthly Pay for Enlisted Men

Grade	Classification	Abbreviation	Base pay
1	Chief Petty Officer.....	CPO	\$165
1-A	Chief Petty Officer (Acting appointment).....	CPO (AA)	150
2	Petty Officer, first class.....	PO1c	135
2	Steward, first class.....	St1c	135
2	Cook, first class.....	Ck1c	135
3	Petty Officer, second class.....	PO2c	115
3	Steward, second class.....	St2c	115
3	Cook, second class.....	Ck2c	115
4	Petty Officer, third class.....	PO3c	100
4	Steward, third class.....	St3c	100
4	Cook, third class.....	Ck3c	100
5	Seaman, first class.....	S1c	90
5	Fireman, first class.....	F1c	90
5	Hospital Apprentice, first class.....	HA1c	90
5	Bugler, first class.....	Bug1c	90
5	Steward's mate, first class.....	StM1c	90
6	Seaman, second class.....	S2c	80
6	Fireman, second class.....	F2c	80
6	Hospital Apprentice, second class.....	HA2c	80
6	Bugler, second class.....	Bug2c	80
6	Steward's mate, second class.....	StM2c	80
7	Apprentice Seaman.....	AS	75
7	Steward's mate, third class.....	StM3c	75

U. S. Navy Insignia, Grade, Pay, and Allowances for Officers

Insignia	Grade	Pay period	Monthly base pay	Monthly rental allowance		Monthly subsistence allowance	
				With dependents ¹	With no dependents ¹	With dependents ²	With no dependents ²
Five Stars	Fleet Admiral		\$733.33 ³	\$120	\$105	\$42	\$21
Four Stars	Admiral		733.33 ⁴	120	105	42	21
Three Stars	Vice Admiral		733.33 ⁵	120	105	42	21
Two Stars	Rear Admiral (upper half)		733.33	120	105	42	21
Two Stars	Rear Admiral (lower half)		550.00	120	105	42	21
One Star	Commodore	6	366.67	120	105	42	21
Silver Eagle	Captain	6	366.67	120	105	42	21
Silver Maple Leaf	Commander						
	(over 30 yr. service)	6	366.67	120	105	42	21
Silver Maple Leaf	Commander						
	(under 30 yr. service)	5	320.83	120	105	63	21
Gold Maple Leaf	Lt. Comdr. (over 23 yr. service)	5	320.83	120	105	63	21
Gold Maple Leaf	Lt. Comdr. (under 23 yr. service)	4	275.00	105	90	63	21
Two Silver Bars	Lieutenant (over 17 yr. service)	4	275.00	105	90	63	21
Two Silver Bars	Lieutenant (under 17 yr. service)	3	230.00	90	75	42	21
One Silver Bar	Lieutenant (jg)						
	(over 10 yr. service)	3	230.00	90	75	42	21
One Silver Bar	Lieutenant (jg)						
	(under 10 yr. service)	2	200.00	75	60	42	21
One Gold Bar	Ensign (over 5 yr. service)	2	200.00	75	60	42	21
One Gold Bar	Ensign						
	(under 5 yr. service)	1	180.00	60	45	42	21
Warrant specialty in Silver	C. W. O. ⁶						
	(over 20 yr. service)	4	275.00	105	90	63	21
Warrant specialty in Silver	C. W. O. ⁶						
	(over 10 yr. service)	3	230.00	90	75	42	21
Warrant specialty in Silver	C. W. O. ⁶						
	(under 10 yr. service) ⁷		210.00	75	60	42	21
Warrant specialty in Gold	Warrant Officer	1	180.00	60	45	42	21

¹An officer with dependents is not entitled to rental allowance under either of the following conditions: (a) while he is assigned public quarters and his dependents are not prevented by reason of orders of competent authority from dwelling with him; (b) while his dependents occupy public quarters. An officer without dependents is not entitled to rental allowance under any of the following conditions: (a) while he is on sea duty unless the sea duty is temporary duty not exceeding three months; (b) while he is on field duty unless his commanding officer certifies that he was necessarily required to procure quarters at his own expense; (c) while he occupies (or is assigned) public quarters.

²Subsistence allowance on this table is computed on the basis of a 30-day month. For a month of a greater or lesser number of days the amounts should be correspondingly increased or decreased.

³Personal cash allowance is \$416.67. ⁴Personal cash allowance is \$183.33. ⁵Personal cash allowance is \$41.67.

⁶A warrant officer promoted to commissioned warrant officer may be paid the pay provided for a warrant officer if greater than the pay of a commissioned warrant officer. When the total pay and allowances of a commissioned warrant officer shall exceed the rate of \$550.00 per month, the amount of the rental allowance to which such officer is entitled shall be reduced by the amount above \$550.00.

⁷Commissioned warrant officers during first 10 years of commissioned service are entitled to base pay at the rate of \$2520 per annum and the allowances of the second pay period; a certificate of creditable record is not required.

Comparison of the World Navies, January 1946

Class	U. S.	Great Britain	Russia	Italy	France
Battleships.....	23	14	4	5	4
Heavy cruisers.....	26	12	7	1	3
Light cruisers.....	41	50	2	9	6
Aircraft carriers.....	32	12	0	0	0
Escort carriers.....	75	29	0	0	0
Destroyers.....	353	259	51	11	15
Submarines.....	206	115	140	21	18
Total.....	756	491	204	47	46

On January 9, 1929, James W. Beasley, a flagpole sitter, heard the national anthem and stopped sitting.—*F. P. A.*

Whales do not spout water, contrary to popular belief. The moist air blown from the whale's lungs condenses into drops of moisture in the colder atmosphere, giving the appearance of a fountain of water.

The greatest apparent speed of an ocean wave is about twenty-seven miles per hour. Ocean waves reach a height of fifty or sixty feet in the south Atlantic Ocean off the Cape of Good Hope.—*Encyc. Brit.*

The Potsdam Declaration

Text of the declaration issued at Potsdam, Germany, July 26, 1945, outlining the terms under which Japan would be allowed to surrender:

1. We, the President of the United States, the President of the national government of the Republic of China and the Prime Minister of Great Britain, representing the hundreds of millions of our countrymen, have conferred and agreed that Japan shall be given the opportunity to end this war.

2. The prodigious land, sea, and air forces of the United States, the British Empire and China, many times reinforced by their armies and air fleets from the West, are poised to strike the final blow at Japan. This military power is sustained and inspired by the determination of all allied nations to prosecute the war against Japan until she ceases to resist.

3. The result of the futile and senseless German resistance to the might of the aroused free peoples of the world stands forth in awful clarity as an example to the people of Japan.

The might that now converges on Japan is immeasurably greater than that which, when applied to the resisting Nazis, necessarily laid waste to the land, the industry, and the method of life of the whole German people.

The full application of our military power, backed by our resolve, will mean the inevitable and complete destruction of the Japanese armed forces and just as inevitably the utter devastation of the Japanese homeland.

4. The time has come for Japan to decide whether she will continue to be controlled by these self-willed militaristic advisers whose unintelligent calculations have brought the empire of Japan to the threshold of annihilation, or whether she will follow the path of reason.

5. The following are our terms: we will not deviate from them; there are no alternatives; we shall brook no delay.

6. There must be eliminated for all time the authority and influence of those who have deceived and misled the people of Japan into embarking on world conquest, for we insist that a new order of peace, security, and justice will be impossible until irresponsible militarism is driven from the world.

7. Until such a new order is established

and until there is convincing proof that Japan's war-making power is destroyed, points in Japanese territory to be designated by the Allies shall be occupied to secure the achievement of the basic objectives we are here setting forth.

8. The terms of the Cairo declaration shall be carried out and Japanese sovereignty shall be limited to the Islands of Honshu, Hokkaido, Kyushu, Shikoku and such minor islands as we determine.

9. Japanese military forces after being completely disarmed shall be permitted to return to their homes with the opportunity to lead peaceful and productive lives.

10. We do not intend that the Japanese shall be enslaved as a race or destroyed as a nation, but stern justice shall be meted out to all war criminals, including those who have visited cruelties upon our prisoners.

The Japanese government shall remove all obstacles to the revival and strengthening of democratic tendencies among the Japanese people. Freedom of speech and religion and of thought, as well as respect for the fundamental human rights, shall be established.

11. Japan shall be permitted to maintain such industries as will sustain her economy and permit the payment of just reparation in kind, but not those industries which will enable her to rearm for war.

To this end, access to, as distinguished from control of, raw materials shall be permitted. Eventual Japanese participation in world trade relations shall be permitted.

12. The occupying forces of the Allies shall be withdrawn from Japan as soon as these objectives have been accomplished and there has been established in accordance with the freely expressed will of the Japanese people a peacefully inclined and responsible government.

13. We call upon the government of Japan to proclaim now the unconditional surrender of all Japanese armed forces, and to provide proper and adequate assurances of their good faith in such action. The alternative for Japan is prompt and utter destruction.

Japan's Surrender

Text of Japanese surrender document signed aboard the U. S. S. *Missouri* in Tokyo Bay, September 2, 1945, Tokyo time (September 1, New York Time).

1. We, acting by command of and in behalf of the Emperor of Japan, the Japanese government and the Japanese im-

perial general headquarters, hereby accept provisions in the declaration issued by the heads of the governments of the United

States, China, and Great Britain July 26, 1945, at Potsdam, and subsequently adhered to by the Union of Soviet Socialist Republics, which four powers are hereafter referred to as the Allied Powers.

2. We hereby proclaim the unconditional surrender to the Allied Powers of the Japanese imperial general headquarters and of all Japanese armed forces and all armed forces under Japanese control wherever situated.

3. We hereby command all Japanese forces, wherever situated, and the Japanese people to cease hostilities forthwith, to preserve and save from damage all ships, aircraft and military and civil property and to comply with all requirements which may be imposed by the Supreme Commander for the Allied Powers or by agencies of the Japanese government at his direction.

4. We hereby command the Japanese imperial general headquarters to issue at once orders to the commanders of all Japanese forces and all forces under Japanese control, wherever situated, to surrender unconditionally themselves and all forces under their control.

5. We hereby command all civil, military, and naval officials to obey and enforce all proclamations, orders and direc-

tives deemed by the Supreme Commander for the Allied Powers to be proper to effectuate this surrender and issued by him or under his authority and we direct all such officials to remain at their posts and to continue to perform their non-combat duties unless specially relieved by him or under his authority.

6. We hereby undertake for the Emperor the Japanese government, and their successors to carry out the provisions of the Potsdam Declaration in good faith, and to issue whatever orders and take whatever action may be required by the Supreme Commander for the Allied Powers or by any other designated representative of the Allied Powers for the purpose of giving effect to that declaration.

7. We hereby command the Japanese imperial government and the Japanese imperial general headquarters at once to liberate all Allied prisoners of war and civilian internees now under Japanese control and to provide for their protection, care, maintenance, and immediate transportation to places as directed.

8. The authority of the Emperor and the Japanese government to rule the state shall be subject to the Supreme Commander for the Allied Powers who will take such steps as he deems proper to effectuate these terms of surrender.

The Surrender of Germany

Germany surrendered unconditionally to the Western Allies and the Soviet Union at a ceremony in a schoolhouse in Reims, France, at 2:41 A. M., French Time (8:41 P. M., E. W. T., May 6), May 7, 1945. This act brought the European war to a close, five years, eight months and six days after the Nazis started their invasions.

Following is the text of "An Act of Military Surrender."

"1. We, the undersigned, acting by authority of the German High Command, hereby surrender unconditionally to the Supreme Commander, Allied Expeditionary Force, and simultaneously to the Soviet High Command, all forces on land, sea, and in the air who are at this date under German control.

"2. The German High Command will at once issue orders to all German military, naval and air authorities and to all forces under German control to cease active operations at 2301 hours (11:01) Central European Time on Eight May and to remain in the positions occupied at the time. No ship, vessel or aircraft is to be scuttled, or any damage done to their hull, machinery, or equipment.

"3. The German High Command will at once issue to the appropriate commanders, and ensure the carrying out of any fur-

ther orders issued by the Supreme Commander, Allied Expeditionary Force, and by the Soviet High Command.

"4. This Act of Military Surrender is without prejudice to, and will be superseded by, any general instrument of surrender imposed, or on behalf of the United Nations and applicable to Germany and the German Armed Forces as a whole.

"In the event of the German High Command or any of the forces under their control failing to act in accordance with this Act of Surrender, the Supreme Commander, Allied Expeditionary Force, and the Soviet High Command will take such punitive or other action as they deem appropriate.

"Signed at Reims, France, at 0241 hours (2:41 A. M.), on the Seventh day of May, 1945.

"On behalf of the German High Command—Jodl.

"In the presence of:

"On behalf of the Supreme Commander, Allied Expeditionary Force—W. B. Smith.

"On behalf of the Soviet High Command—Ivan Susloparoff.

"On behalf of the French—F. Sevez."

The surrender terms were ratified in Berlin on May 8, 1945, and the war officially ended at 12:01 A. M., May 9, 1945.

UNITED STATES SERVICE ACADEMIES

THE UNITED STATES MILITARY ACADEMY

Source: U. S. Military Academy.

The U. S. Military Academy opened on July 4, 1802, with less than a dozen cadets, but it was not until 1812, when 250 cadets were appointed, that it began its regular curriculum.

The present Academy, with its various buildings, covers about $5\frac{1}{2}$ square miles.

The 2,500 cadets include:

- 4 from each congressional district
- 8 from each state at large
- 4 each from Hawaii and Alaska
- 6 from the District of Columbia
- 4 natives from Puerto Rico
- 2 from Panama Canal Zone
- 3 recommended by the Vice President
- 10 graduates of "honor military schools"
- 10 sons of veterans who died in line of duty
- 10 from Regular Army and Natl. Guard
- 4 Filipino cadets

The President makes the appointments upon recommendation by representatives, senators, delegates in Congress, commissioners of the District of Columbia, resident commissioners, Governor of the Canal Zone, heads of schools, commanding generals, or by his own choice, based upon competitive examinations.

Candidates must be between the ages of 17 and 22, unmarried, and able to pass the physical requirements. They may satisfy the educational requirements by taking entrance examinations, by presenting any acceptable secondary school certificates and taking special examinations in English and mathematics, or by presenting a sufficient number of college course certificates.

A cadet receives \$780 for each of his four years. Upon graduation with a degree of Bachelor of Science, he is commissioned a second lieutenant and must serve for at least four years. He may not marry for one year after graduation.

THE UNITED STATES NAVAL ACADEMY

Source: U. S. Navy

On October 10, 1845, the Naval School was established at Fort Severn, Annapolis, Maryland. Five years later it was renamed the United States Naval Academy, and the following year a regular four-year course was adopted. At present, the course includes seamanship, engineering, marine warfare, navigation, aviation, international law, and languages, in addition to general studies.

Candidates are selected as follows:

- 10 from the District of Columbia
- 10 sons of men and women killed in active service

25 sons of officers and enlisted men in the regular Army, Navy, or Marine Corps

100 enlisted Navy and Marine personnel selected by competitive examination

100 chosen by the Secretary of the Navy from the Naval and Marine Corps Reserves

5 Puerto Ricans chosen by the Resident Commissioner of Puerto Rico

4 Filipinos chosen by the President of the Philippines

1 from the Canal Zone

20 from schools designated by the Army and Navy as honor schools

20 from the American republics

Each senator, representative, delegate to Congress, and the Vice President names 5 candidates annually. The President selects the 5 from the District of Columbia, the 40 sons of men and women killed in active service and the 25 sons of officers and enlisted men in the regular Army, Navy or Marine Corps.

Candidates for admission must be between 17 and 21 years of age on April 1 of their entering year. They may qualify by taking entrance examination, by presenting any acceptable secondary school certificates and taking special examinations in English and mathematics, or by completing a sufficient number of acceptable college courses. Candidates must also meet the physical requirements and promise to remain unmarried until graduation.

Candidates are paid \$780 a year as midshipmen. Upon graduation, candidates are granted Bachelor of Science degrees and are commissioned as ensigns in the Navy or second lieutenants in the Marine Corps.

THE UNITED STATES COAST GUARD ACADEMY

Source: Our Coast Guard Academy, Riley Hughes.

On July 31, 1876, the Coast Guard Academy, then known as the Revenue Cutter Service, was established by law. In 1914, the school was named the Revenue Cutter Academy. The following year, when the Revenue Cutter Service was merged with the Life Saving Service to form the Coast Guard, the present name of Coast Guard Academy was established. In 1932, the Coast Guard Academy was moved from Fort Trumbull to another site in New London, where it has remained to this day.

The Academy is accredited by the Association of American Universities and grants the degree of Bachelor of Science in Marine Engineering to each graduate. The curriculum includes mathematics, physics, marine engineering, seamanship,

navigation, compass correction, naval architecture, and other engineering courses.

Candidates for admission must be between 17 and 22 years of age, physically sound, unmarried, and at least 5 feet 6 inches high. They must agree to remain unmarried until graduation and to serve at least three years after graduation. Cadets are paid \$780 a year and are commissioned as ensigns in the Coast Guard upon graduation.

THE UNITED STATES MERCHANT MARINE CADET CORPS

Source: War Shipping Administration.

The United States Merchant Marine Cadet Corps was established on March 15, 1938. Appointments are made on the basis of competitive examinations and a physical examination. Successful candidates, appointed as cadet-midshipmen in the United States Naval Reserve, are assigned to the Cadet School at Pass Christian, Mississippi, or at San Mateo, California, as Fourth Classmen. They may choose courses to become either deck or engineer officers. Upon completion of a plebe year, they are as-

signed to merchant ships as Third Classmen for practical training and 5 hours a day of academic work.

The last two years of the course are spent as Second and First Classmen at the United States Merchant Marine Academy at Kings Point, Long Island, New York. The course of study includes marine engineering, navigation, electricity, ship construction, naval science and tactics, economics, business language, history, and other cultural subjects.

A candidate must be an unmarried citizen between the ages of 16½ and 21. In the cases of veterans a waiver of three years is allowed on the maximum age. He must have 15 high-school credits, including 1 unit in algebra, 1 in plane geometry, 1 in science, and 3 in English.

A candidate is paid \$780 each year by the government except for his Third Class year, when the shipping company pays him. Graduates of the cadet corps receive a license as a deck or engineer officer in the Merchant Marine, a commission as ensign in the United States Naval Reserve, and the rank of ensign in the United States Maritime Service.

The American Red Cross

The American National Red Cross was organized in 1881 by its founder and first president, Clara Barton. In accordance with the Treaty of Geneva, which the United States signed in 1882, it was reincorporated under government supervision on January 5, 1905, by act of Congress. The President of the United States is president, ex-officio, of the American Red Cross. The present chairman is Basil O'Connor, who is also chairman of the Board of Governors of the League of Red Cross Societies. National headquarters are at 17th and D Streets, N. W., Washington, D. C. Total membership is approximately 36 million adults and 20 million children.

The primary function of the American Red Cross is to provide volunteer aid for

the sick and wounded in peace or war; to serve as an emergency communication link between the people of the United States and its armed forces; and to provide relief in national and international calamities. Foreign civilian war relief, furnished by and through the American Red Cross, totaled approximately 165 million dollars. The Blood Donor service procured 13,326,242 pints of blood. The organization trained over 1,400,000 persons in first aid during the war years. Over 35 million articles were made and distributed to servicemen by children of the Junior Red Cross. Since cessation of hostilities, the American Red Cross has not only reverted to its peacetime activities but has continued to maintain numerous services carried over from wartime functions.

United Service Organization, Inc.

The USO was chartered February 4, 1941, by the Young Men's Christian Associations, the National Catholic Community Service, the Salvation Army, the Young Women's Christian Associations, the National Jewish Welfare Board, and the National Travelers Aid Association. Recreation and canteen services were confined to the United States and to noncombat zones in the war theaters. USO-Camp Shows, however, the sole agency to take professional theatrical talent from the United States to troops overseas, served in

the several war theaters. Activities reached a peak in March 1944, when expenditure reached \$5,800,000 a month with approximately 730,000 volunteers engaged in activities relating to entertainment of servicemen at home and abroad. At the request of General Omar N. Bradley, USO-Camp Shows on March 1, 1946, continued to provide entertainment to servicemen in Veterans Administration hospitals.

National headquarters are in the Empire State Building, New York 1, New York.

THE UNITED NATIONS



by HAROLD E. STASSEN

Assistant Chief of Staff to Admiral William F. Halsey in the Pacific. Three-term governor of Minnesota and chairman National Governors' conference, 1940-41. Delegate in 1945 to the San Francisco Conference at which the United Nations Charter was drafted.

THE FIRST YEAR of the United Nations as a postwar continuing organization is marked by two major over-all factors. The first was numerous manifestations of the No. 1 postwar question—the relations between Russia and the United States and Great Britain. In instance after instance in the functioning of the fledgling organization, and in the peace conferences, the differences in viewpoint and ideologies and aspirations were reflected in deadlocked conferences, vetoed decisions, sharp words, and uncertainty.

The second major factor was the rapid establishment of the various machineries of the United Nations itself with the beginning of definite functioning of the Security Council, the Assembly, the Social and Economic Council, the World Court, the Atomic Energy Commission, and a dozen lesser bodies and boards. But this speed of development occurred against a background of even more rapid movement in world events and amazing advances in science, which caused the widespread question as the year drew to a close whether not the United Nations, with all their commendable speed of organization were moving fast enough.

It was too early to form any fixed opinion either of deep pessimism or wild optimism. There was widespread recognition that the United Nations did represent the best hope of a lasting and just peace as the year closed on the turbulent and uneasy world situation not unexpected in the wake of the tragic and tremendously destructive World War II.

It was also a fact that there was an increasing recognition by all nations of the importance of the forum which the United Nations bodies provided. The members tested for favorable world public opinion and showed respect for the moral authority of the world brought to bear through the early sessions of the United Nations.

The General Assembly

After three years of preparatory work, the United Nations came into being on January 10, 1946, when the General Assembly met in London, with delegates from fifty-one nations attending. The principal business of this first meeting was to complete the organization of the Security Council. The five permanent members of the Council already had been selected—China, France, the Union of Soviet Socialist Republics, the United Kingdom and the United States. They had been specified in the United Nations charter when it was drawn up at the San Francisco Conference in the Spring of 1945. To complete the Council, six non-permanent members were to be elected for one-year and two-year terms by the General Assembly. The nations chosen were Australia, Brazil, Egypt, Mexico, the Netherlands and Poland.

The General Assembly, in which each nation has one vote, has been called the "Town Meeting of the World." Here the world's troubles are to be talked over. After the discussion the Assembly may tell any nation, or the Security Council, what it thinks should be done to improve matters. The Assembly must confine itself, however, to suggesting peaceful ways of ironing things out; it may not recommend methods of force. The Assembly may talk about anything it pleases (providing the matter is not at the moment in the hands of the Council), but it has no power to take action against any nation, nor may it enact any laws. It must rely on the force of world opinion to make its influence felt.

The Assembly decides what share each nation pays toward the costs of the United Nations. It is to meet once a year; the first annual meeting (not counting the earlier organization meeting) began at the headquarters of the United Nations at Lake Success, L. I., on October 23, 1946.

The Security Council

The Security Council does not have any parallel in the mechanisms of government with which we are familiar on local and national levels. In some respects, it can function somewhat like a grand jury in investigating, in hearing the parties to disputes, and in making findings or recommendations. It can also act somewhat as an umpire between two disputing nations and seek to bring out the facts and mediate the differences. It is also the nearest approach to a community sheriff on a world level as it has certain responsibilities and powers of enforcement to prevent the outbreak of war.

The procedure set up as to any dispute or situation, the existence of which is a threat to world peace, is as follows: The parties to the dispute are first required to endeavor to settle the dispute between themselves. If they fail to do so, either one of them or any member or the Secretary General himself may bring the dispute before the Security Council. The Security Council may investigate and may mediate and may act as an umpire. It may also make a specific finding and recommendation for settlement, which, in effect, is a judgment upon the facts. If the parties do not accept this settlement or if in other respects world peace is threatened, enforcement action may be taken in the nature of economic sanctions—(penalties) against an offending country, which may take the form of cutting it off from all commerce and travel and trade and communication with the rest of the world.

As a final step to prevent or suppress war, the Security Council may send into action armed forces by land, sea or air. The Charter contemplates that each of the members should place an agreed part of its armed forces and facilities at the Council's disposal for this purpose as a United Nations police force.

The Charter also provides for a military staff committee for this purpose. This military staff committee met in London on February 4, 1946, and again in New York the following month, but at the time this was written the definite forces had not been agreed upon or allocated.

The weakness in this entire procedure was of course the voting provision which is commonly referred to as the veto power.

The Veto Power

The voting provision in the Security Council is of such basic importance that it is worth giving a brief recital of its background and of its functioning.

At the Dumbarton Oaks Conference it was impossible to reach agreement between Russia and Great Britain and the United States on the voting provision. It

appears that at that time there was concern both in this country, particularly in the U. S. Senate, and in Russia, that one or the other, or both of these major powers, which were entering into full world responsibilities for the first time, might find themselves in the minority and outvoted in the vital decisions of the Security Council for the maintenance of the peace. Consequently, the Dumbarton Oaks Conference closed without a voting provision and the tentative recommendation were presented to the nations of the world without a voting provision in the Security Council. The voting provision as it now stands in the Charter was brought to the Yalta Conference by President Roosevelt and the Secretary of State of the United States and there approved by Marshal Stalin and by Winston Churchill. It was not then interpreted in any written document.

At the San Francisco Conference the smaller nations made repeated efforts to change this voting provision, but the major powers would not yield and the final question was one of interpretation of the language. Russia sought a very rigid interpretation, including even the power to veto the discussion and consideration of a dispute before the Security Council. But the United States and other members insisted that there at least be an interpretation that the Security Council, without veto, could go through the first peaceful steps of taking up a dispute, discussing it, considering it, and recommending a settlement. This interpretation finally prevailed. Russia yielded after a personal conference by Harry Hopkins with Marshal Stalin at Moscow.

It was also agreed, as the terms of the voting arrangement provide, that a party to a dispute must refrain from voting, and hence cannot veto, during any of the peaceful steps of the consideration of a dispute.

The voting provision is referred to as emphasizing the need and importance of unanimity among the Big Five if there is to be world peace. The theory has sound aspects if, and only if, there is a genuine effort on the part of each of the Big Five to reach a fair agreement.

Its clear effect, of course, is that the Security Council itself can bring no more than the moral force of world opinion to bear against anyone of the Big Five because of this veto provision.

It is important to note, however, that if through the use of a veto the Security Council cannot act, the members of the United Nations are not thereby released under the terms of the Charter from their obligations to refrain from aggression, to use force to keep the peace, and to deal justly with their fellow members. Thus the burden of reaching peaceful

agreements, regardless of the voting arrangement or the use of the veto, tends to divert attention to the outward indications of the failure to agree, when the real problem is the fundamental need for reaching agreement.

It is also important to note that there is no veto provision in the General Assembly, or in the Social and Economic Council, or in the World Court, or in the Trusteeship Council.

Work for the Council

The first meeting of the Security Council opened in London on January 17, 1946, a week after the Assembly. The Big Five hoped this would be a quiet meeting devoted to organizing. It was not. Differences of viewpoint between Russia and her war partners immediately cropped up.

The first complaint to the Council came from Russia's small southern neighbor, Iran (formerly known as Persia). Iran said Russian occupation troops were not being withdrawn as promised, and that Russia was exerting undue political pressure, particularly over Iran's northern province, Azerbaijan, which adjoins the U. S. S. R.

When Iran made this appeal to the Council, Russia apparently thought it had been inspired by England. Even before World War I England and Russia had vied for control of Persia. To Moscow it perhaps looked as though the age-old rivalry was being renewed through the new United Nations. Russia made a diplomatic counterattack, bringing charges against England before the Council. England was accused of disturbing world peace by keeping her troops in Greece and in Iraq (which was revolting against the Netherlands).

The Security Council found no cause for action against England on the score of British troops being in Greece or in Iraq. The Council kept the question of Iran on the agenda; that is, it kept its eye on the situation and asked for reports as to whether Russia was abiding its promise to withdraw occupation troops. Russia insisted that this was none of the Council's business; Moscow was so annoyed that the Soviet delegate, Andrei Gromyko, walked out of the Security Council sessions that dealt with Iran. The Council continued to do business with Russia's seat temporarily vacant.

Iran had first appealed to the Security Council against Russian "interference" on January 19, 1946, when the Council was meeting in London. The Council moved to New York and the matter still hung fire; finally in early May Iran said Soviet occupation troops had left. In the meantime Russia had received by process of negotiation concessions in Northern Iran. And

the province of Azerbaijan, which had been in dispute, had received a degree of autonomy.

The next topic which came before the Security Council was that of Spain. Russia contended that the regime of Generalissimo Francisco Franco constituted an immediate threat to world peace because he was a pro-Axis dictator. Russia said the Council should take steps to correct the situation—at least by breaking off diplomatic relations and perhaps economic relations, too. England and the United States publicly avowed dislike for Franco, but were apparently reluctant to take any international action against his regime. They said that the Charter forbids the United Nations to interfere with the internal affairs of a country. Moreover, they indicated that outside action against Franco might precipitate civil war in Spain.

It was in connection with the Spanish topic that Soviet Russia brought into the spotlight the problem of the Big Five veto power. Three times on the afternoon of June 26, 1946, Russia employed the veto.

The issue was this: All the Security Council members wanted to keep Spain on the agenda. Most members also wanted to give the General Assembly specific permission to discuss what to do about the Franco regime. (Ordinarily the Assembly is barred from discussing a matter while the Council is dealing with it). But Russia and her unwavering ally, Poland, did not want to let the Assembly take a hand; they wanted immediate Council action.

So Russia exercised the veto twice in that connection. Australia then said Russia had no right to use the veto on the pending motion because the question was a procedural one, that is, it concerned only the manner in which the Council would take up the main subject, and did not involve a decision of the issue on the merits. The Council took a vote and the majority agreed with Australia. But Russia again asserted a veto.

The International Court

The third coordinate branch of the United Nations structure, standing by the side of the Security Council and the General Assembly, is the International Court of Justice. Fifteen eminent judges—no two from the same country—make up the Court; they are elected by the Council and the Assembly.

The Court first met at The Hague on April 3, 1946, to organize. England announced that she was willing to submit, as a first case, a boundary dispute which has gone on for many years between British Honduras and Guatemala.

In addition to boundary disputes, the Court is designed to settle arguments about the correct interpretation of treaties; ques-

tions of whether a nation has violated a treaty, and if so, whether damages should be paid; and other questions of international law.

Some nations already have agreed that they will submit all legal disputes to the Court and abide by its decisions. In other words, they have accepted "compulsory jurisdiction." On August 2, 1946, the Senate voted that the United States accept compulsory jurisdiction, with the reservation that domestic matters, as judged by itself, are not to go before the Court.

The International Court may receive disputes either from individual nations or from the Security Council. If a nation which has agreed to the Court's jurisdiction refuses to abide by the verdict, then it is the responsibility of the Security Council to enforce obedience.

The Economic and Social Council

The Economic and Social Council is a semi-independent body under the supervision of the General Assembly. Its basic purpose is to remove the underlying causes of war by correcting the injustices which beset so many people in this world and make them discontented. The task is enormous.

More specifically, the Economic and Social Council is instructed by the Charter to promote: higher standards of living throughout the world; better health conditions; observance of human rights and freedoms; full employment. Eighteen nations are members, and they are normally elected for three-year terms by the General Assembly.

In a sense the Economic and Social Council may be called the trouble shooter for the United Nations in nonpolitical fields. It is to make studies of what ails this world, and then recommend what might be done. It may call international conferences and may suggest treaties on economic or social matters. Its recommendations may be made to the General Assembly, or to individual nations, or to the world agencies which were established before the United Nations structure was completed.

The first meeting of the Economic and Social Council was held in London from January 25 to February 18, 1946. The next meeting opened in New York on May 25th. Nine commissions were established in the course of the year to deal with various phases of the Council's work. They were:

- Commission on Human Rights, of which Mrs. Franklin D. Roosevelt was first chairman.
- Commission on Narcotic Drugs.
- Commission on Transport and Communications.

- Economic and Employment Commission.
- Statistical Commission.
- Fiscal Commission.
- Social Commission.
- Commission on the Status of Women.
- Commission on Freedom of Information and the Press.

The Atomic Energy Commission

Nothing is said in the United Nations Charter about controlling the atomic bomb, but there are provisions for disarmament, for regulation of armaments, and for establishment of special commissions.

After the bombs had exploded over Hiroshima and Nagasaki and Japan had surrendered, the three nations which possessed the secret—the United States, England and Canada—proposed on November 15, 1945 that the United Nations set up a separate commission to control atomic energy. In due course such a commission was established by the General Assembly and was put under the authority of the Security Council. Nations on the Council were made members of the atomic commission, with the addition of Canada.

Man's combined effort to save himself from the annihilating power of the atom began on June 14, 1946, at the first meeting of the United Nations Atomic Energy Commission in New York. Bernard M. Baruch, the United States member, presented this country's plan for outlawing the atom as an instrument for destroying civilization and for developing it, instead, as a benefit to mankind. "We are here to make a choice between the quick and the dead," said Mr. Baruch.

Nearly all the other nations of the commission favored the American proposal as a basis for working out an international agreement. Russia suggested a markedly different plan for atomic control. Since this became a topic of the most urgent discussion during the latter part of 1946, it is worth noting the main differences between the American approach and that of Soviet Russia.

In brief, the American plan was this:

1. Set up an International Atomic Development Authority, composed of leading scientists of various nations. This I. A. D. A. would control all deposits, anywhere in the world, of uranium and thorium, which are the mineral sources of atomic energy. It would control the plants making fissionable material. It would distribute the material to manufacturers and laboratories wanting to use it for peaceful purposes such as power development or medical research.
2. The I. A. D. A. would send its inspectors into every nation of the world to make sure nobody was using atomic energy for warlike ends.

3. The United Nations would administer swift and drastic punishment in case any nation attempted to make bombs. No nation would have the right to veto such punishment.

4. After the international control machinery was set up and working well, the United States would dispose of its supply of bombs and reveal its secrets to the A. D. A.

The Soviet proposals contemplated a different order of events. Instead of creating world authority to control the basic materials of atomic energy, the Russian plan would:

1. Leave it up to each individual nation to develop its own atomic energy; and sign treaty outlawing atomic weapons.

2. Require existing atomic weapons (meaning those in the United States) to be destroyed within three months after ratification of the treaty outlawing them.

Thus as the discussions began, Russia proposed the three basic principles which the United States suggested: (a) International control; (b) International inspection; and (c) Abolition of the big-nation to power. Nevertheless, the United Nations Atomic Energy Commission went to work in the hope of reconciling the American and Soviet views and devising an acceptable system of atomic control.

Trusteeship Council

Under the League of Nations there existed a system of mandates by which strong powers administered colonial areas. To replace the mandate plan the United Nations set up a trusteeship system. Former League mandates may be put under trusteeship; also Axis lands taken over in the recent war; and any other dependent territories which the controlling countries wish to place under trusteeship.

No nation is obliged to put a colony or dependency under trusteeship. If it does it is saying in effect: "We want the United Nations to share our responsibility seeing that this dependent land is governed well, and in accordance with the principles set forth in the Charter." The goals of the trusteeship system are high: to promote the political, social and educational advancement of the dependent people and to help them develop the ability to govern themselves.

The Charter provides for establishing a Trusteeship Council, to be made up of five United Nations members which administer dependent territories, plus an equal number of countries which do not. The Council is authorized to receive reports from administering nations; to hear petitions from dependent territories, and to inspect them.

There was delay in getting a Trusteeship

Council set up. England was the first to say she would make use of the trusteeship system when it began to function. She was willing to put her parts of the Cameroons and Togoland—former German colonies in Africa—under trusteeship.

While trusteeships are usually under the General Assembly's supervision, a second type was provided in the Charter. In the case of "strategic areas"—that is key spots for defense—the nation controlling them can designate them as such and be answerable to the Security Council for their administration only to the extent provided in the original trusteeship agreements which may protect the security interests of the administering nation.

The Secretariat

The first Secretary-General of the United Nations was Trygve Lie (pronounced as though spelled Trigva Lee), who used to be Norway's Foreign Minister. As chief administrative officer of the organization he headed a permanent staff of people looking after the million details involved in operating so complex a structure.

One of the things that made life complicated for the secretariat in the first year was the lack of a real home for the United Nations. The General Assembly voted in the spring of 1946 to build permanent headquarters in the eastern part of the United States. Various sites were examined in an area near New York City embracing parts of Westchester County, New York, and Fairfield County, Connecticut.

Meanwhile, the Security Council used a building belonging to Hunter College in New York City as its first temporary home. Then it moved downtown to the Henry Hudson Hotel. And in August it moved out to Lake Success, in Nassau County on Long Island, where it hopes to stay several years until a permanent home for the United Nations can be constructed. The General Assembly held its annual meeting, beginning October 23rd, at Flushing Meadow in the Queens section of New York City.

Specialized Agencies

In the orbit of the United Nations, somewhat like satellites around a planet, are a group of independent world organizations. The Economic and Social Council is empowered to keep an eye on them and advise them, but actually they pretty much run their own affairs. Several of these "specialized agencies," as they are called, were founded before the United Nations Charter was drawn up; and one of them has admitted to membership countries that do not belong to the United Nations.

Following is a brief description of the specialized agencies:

U. N. R. R. A.

The United Nations Relief and Rehabilitation Administration was established in November, 1943, with forty-four nations participating; four other nations joined later. The first director was Herbert H. Lehman, and the second was Fiorello H. La Guardia. The purpose of the U. N. R. R. A. was to care for victims of the war by supplying food, clothing, coal, farm equipment; and to provide shelter for refugees. U. N. R. R. A. worked in thirty-nine countries, distributed about 14,000,000 tons of food and goods; spent nearly \$4,000,000,000. It was scheduled to end operations in Europe at the end of 1946, and in the Far East by April, 1947.

F. A. O.

The International Food and Agriculture Organization grew out of the war food conference held in Hot Springs, West Virginia, in May, 1943. It came into being in November, 1945, with thirty nations participating. Its purpose is long-range, as contrasted with the war emergency work of U. N. R. R. A. The F. A. O. hopes to make the people of the world eat better, over the course of years, by increasing the sum total of food crops and improving the distribution of food so that some people will not starve while others have more crops than they can sell.

World Bank and Fund

These two financial organizations—the International Bank for Reconstruction and Development; and the International Monetary Fund—were planned at a conference in Bretton Woods, New Hampshire, in July, 1944. They came into being at Savannah, Georgia, in March, 1946. Eugene Meyer, of Washington, D. C., a banker and newspaper publisher, was chosen first president of the bank.

The purpose of the International Bank is to help war-stricken nations to get back on their feet economically by lending them money; also, to help build up undeveloped countries. Each participating nation subscribes to a share of the bank's capital, in proportion to its own wealth; the United States pledged the biggest subscription.

The purpose of the Monetary Fund is to help governments keep the value of their currencies stable; that is, to keep the franc, for example, from fluctuating wildly in terms of the dollar. When currencies are rubberlike, international trade tends to dry up because merchants do not know what they can depend on.

U. N. E. S. C. O.

The United Nations Educational, Scientific, and Cultural Organization was provided for by the Charter; the first steps

toward establishing it were taken in June 1945, in Paris. It is designed to give the savants of the world an opportunity to exchange ideas and to promote mutual understanding through cooperation in the fields mentioned in the title.

W. H. O.

The World Health Organization was promulgated in July 1946, in New York City. Representatives of sixty-three nations (including twelve not members of the United Nations) signed the constitution. Italy and Austria were among the signers, participating in such a conference for the first time since the war. The purpose of the organization, as stated by the chief United States delegate, Surgeon General Thomas Parran, is to "help eliminate the ancient human plagues, such as malaria, cholera, tuberculosis and syphilis."

C. A. O.

The Civil Aviation Organization was formed in 1944 to deal with the world-wide problems of peacetime commercial aviation. Its purpose is to see that air rules are formulated and observed, and to facilitate navigation.

Labor Organizations

Although they have no direct connection with the United Nations, two labor organizations should be mentioned:

The International Labor Organization (I. L. O.) was formed under the League of Nations and has been functioning a quarter of a century. It is made up of representatives of employers, workers' governments. Its purpose is to improve working agreements by encouraging international agreements as to conditions, hours and pay. The American Federation of Labor participates in the I. L. O. Soviet Russia does not.

The World Federation of Trade Unions (W. F. T. U.) was founded in Paris in October, 1945. It is composed solely of labor union representatives, and it claims to represent 66,000,000 workers. Of these, number 27,000,000 are in Russia. The American Congress of Industrial Organizations is affiliated with the W. F. T. U.

Beginnings of the United Nations

On January 1, 1942, twenty-six nations signed in Washington, D. C., a declaration pledging themselves to fight the war to their utmost and to make no separate peace. The name "United Nations" not mentioned in the declaration, but signatory countries soon came to be called that.

The first official statement of the intention to form a postwar world organization came at a meeting of Foreign Ministers

Moscow in October, 1943. Russia, England, China and the United States signed the Moscow pact, Article 4 of which read: "That they recognize the necessity of establishing at the earliest practicable date a general international organization based on the principle of the sovereign equality of all peace-loving states, and open to membership by all such states, large and small, for the maintenance of international peace and security."

From August 21 to October 7, 1944, representatives of the United States, England, Russia and China, met at Dumbarton Oaks, an estate in Washington, D. C., and drew up a set of proposals for the postwar United Nations Organization. They were submitted to the other nations for study.

In February, 1945, President Roosevelt, Prime Minister Churchill and Marshal Stalin met at Yalta, in the Crimea. There they agreed upon the voting arrangement in the Security Council, including the veto provision.

The United Nations Charter was drawn up, on the basis of the Dumbarton Oaks proposals, at the San Francisco Conference of fifty nations from April 25 to June 25, 1945.

The United States Senate ratified the Charter on July 28 by a vote of 89 to 2. On October 24, 1945, the United Nations came formally into existence when Soviet Russia became the twenty-ninth nation to ratify the Charter. Subsequently all fifty of the original signers ratified.

The League of Nations

The Covenant of the League of Nations was drawn up at the Versailles Peace Conference of 1919 and was incorporated into the peace treaty. On November 19, 1919, the United States Senate rejected membership in the League by a vote of 49 to 35.

The Council of the League met first in Paris on January 16, 1920. The permanent members were England, France, Italy and Japan; and there were four nonpermanent members. Germany was made a permanent member when she was admitted in 1926. Russia was made a permanent member when she was admitted in 1934. Non-permanent members of the Council were increased to nine in 1926.

The Assembly of the League met first on November 15, 1921, with forty-one nations participating. Headquarters were established in Geneva, Switzerland, where the elaborate, 700-room Palace of the League of Nations was completed in 1936. The Permanent Court of International Justice

(World Court) was established on January 30, 1922, at The Hague.

The heart of the League Covenant was Article X, which bound all member nations to "respect and preserve as against external aggression the territorial integrity and existing political independence of all members of the League." Article XVI said that if any League member resorted to war, all other members were to stop all commerce with it. This became known as the application of economic sanctions.

The League itself governed the Saar region on the Franco-German border until March 1, 1935, when it was turned over to Germany after the Saar residents so voted in a plebiscite. The League governed the Free City of Danzig until the Germans conquered it in 1939.

The first dispute presented to the League was a complaint by Persia (now known as Iran) on May 19, 1920, that her northernmost province had been invaded by Soviet Russia. Russia withdrew her troops. The League successfully settled numerous minor disputes—Finland vs. Sweden; Poland vs. Lithuania, etc. Italy defied the League in 1923 by seizing the Greek island of Corfu. Mussolini refused to withdraw troops until Greece had complied with his drastic punitive demands.

The next major defiance of the League was in 1931 when Japan invaded Manchuria. The League verbally condemned Japan two years later, but took no action. Japan withdrew from the League in 1935.

On October 3, 1935, Italy invaded Ethiopia; both nations were League members. For the first and only time the League put into effect the economic sanctions mentioned in Article XVI—but not all of them. One vital war material—oil—still was sold to Italy. After conquering Ethiopia, Italy withdrew from the League in 1937.

In 1936 Germany broke the Versailles Treaty by rearming and by remilitarizing the Rhineland. The League did nothing to check Germany, and Hitler took his country out of the League. The League was equally ineffective in preventing German and Italian intervention in behalf of General Franco's rebellion in Spain.

The only nation to be expelled from the League of Nations was Russia. That happened in December, 1939, because of Russia's war against Finland.

No meetings of the League of Nations were held after World War II began in 1939 until the final session of the Assembly at Geneva in April 1946. That session dissolved the organization.

Genocide: Cuba, India and Panama referred a proposal to the United Nations General Assembly, to outlaw genocide, defined as those instances "when national, racial, ethnical or religious groups have been destroyed, entirely or in part, as government policy."

CHARTER OF THE UNITED NATIONS

WE, the peoples of the United Nations Determined to save succeeding generations from the scourge of war, which twice in our lifetime has brought untold sorrow to mankind, and

To reaffirm faith in fundamental human rights, in the dignity and worth of the human person, in the equal rights of men and women and of nations large and small, and

To establish conditions under which justice and respect for the obligations arising from treaties and other sources of international law can be maintained, and

To promote social progress and better standards of life in larger freedom, and for these ends

To practice tolerance and live together in peace with one another as good neighbors, and

To unite our strength to maintain international peace and security, and

To insure, by the acceptance of principles and the institution of methods, that armed force shall not be used, save in the common interest, and

To employ international machinery for the promotion of the economic and social advancement of all peoples, have resolved to combine our efforts to accomplish these aims.

Accordingly, our respective governments, through representatives assembled in the city of San Francisco, who have exhibited their full powers found to be in good and due form, have agreed to the present Charter of the United Nations and do hereby establish an international organization to be known as the United Nations.

CHAPTER I

Purposes and Principles

Article 1

The purposes of the United Nations are:

1. To maintain international peace and security, and to that end: to take effective collective measures for the prevention and removal of threats to the peace, and for the suppression of acts of aggression or other breaches of the peace, and to bring about by peaceful means, and in conformity with the principles of justice and international law, adjustment or settlement of international disputes or situations which might lead to a breach of the peace;

2. To develop friendly relations among nations based on respect for the principle of equal rights and self-determination of peoples, and to take other appropriate measures to strengthen universal peace;

3. To achieve international cooperation in solving international problems of an economic, social, cultural or humanitarian

character, and in promoting and encouraging respect for human rights and for fundamental freedoms for all without distinction as to race, sex, language or religion; and

4. To be a center for harmonizing the actions of nations in the attainment of these common ends.

Article 2

The organization and its members, in pursuit of the purposes stated in Article 1, shall act in accordance with the following principles:

1. The organization is based on the principle of the sovereign equality of all its members.

2. All members, in order to ensure to all of them the rights and benefits resulting from membership, shall fulfill in good faith the obligations assumed by them in accordance with the present Charter.

3. All members shall settle their international disputes by peaceful means in such a manner that international peace and security, and justice, are not endangered.

4. All members shall refrain in their international relations from the threat or use of force against the territorial integrity or political independence of any state, or in any other manner inconsistent with the purposes of the United Nations.

5. All members shall give the United Nations every assistance in any action it takes in accordance with the present Charter, and shall refrain from giving assistance to any state against which the United Nations is taking preventive or enforcement action.

6. The organization shall ensure that states not members of the United Nations act in accordance with these principles so far as may be necessary for the maintenance of international peace and security.

7. Nothing contained in the present Charter shall authorize the United Nations to intervene in matters which are essentially within the domestic jurisdiction of any state or shall require the members to submit such matters to settlement under the present Charter; but this principle shall not prejudice the application of enforcement measures under Chapter VII.

CHAPTER II

Membership

Article 3

The original members of the United Nations shall be the states which, having participated in the United Nations Conference on International Organization at San Francisco, or have previously sign-

the Declaration by United Nations of Jan. 1, 1942, sign the present Charter and ratify it in accordance with Article 110.

Article 4

1. Membership in the United Nations is open to all other peace-loving states which accept the obligations contained in the present Charter and, in the judgment of the organization, are able and willing to carry out these obligations.

2. The admission of any such state to membership in the United Nations will be effected by a decision of the General Assembly upon the recommendation of the Security Council.

Article 5

A member of the United Nations against which preventive or enforcement action has been taken by the Security Council may be suspended from the exercise of the rights and privileges of membership by the General Assembly upon the recommendation of the Security Council. The exercise of these rights and privileges may be restored by the Security Council.

Article 6

A member of the United Nations which has persistently violated the principles contained in the present Charter may be expelled from the organization by the General Assembly upon the recommendation of the Security Council.

CHAPTER III

Organs

Article 7

1. There are established as the principal organs of the United Nations: A General Assembly, a Security Council, an Economic and Social Council, a Trusteeship Council, an International Court of Justice and a Secretariat.

2. Such subsidiary organs as may be found necessary may be established in accordance with the present Charter.

Article 8

The United Nations shall place no restrictions on the eligibility of men and women to participate in any capacity and under conditions of equality in its principal and subsidiary organs.

CHAPTER IV

The General Assembly

Composition

Article 9

The General Assembly shall consist of all the members of the United Nations.

Each member shall not have more than five representatives in the General Assembly.

Functions and Powers

Article 10

The General Assembly may discuss any questions or any matters within the scope of the present Charter or relating to the powers and functions of any organs provided for in the present Charter, and, except as provided in Article 12, may make recommendations to the members of the United Nations or to the Security Council, or to both, on any such questions or matters.

Article 11

1. The General Assembly may consider the general principles of cooperation in the maintenance of international peace and security, including the principles governing disarmament and the regulation of armaments, and may make recommendations with regard to such principles to the members or to the Security Council or to both.

2. The General Assembly may discuss any questions relating to the maintenance of international peace and security brought before it by any member of the United Nations, or by the Security Council, or by a state, which is not a member of the United Nations, in accordance with Article 35, Paragraph 2, and, except as provided in Article 12, may make recommendations with regard to any such questions to the state or states concerned or to the Security Council, or both. Any such question on which action is necessary shall be referred to the Security Council by the General Assembly either before or after discussion.

3. The General Assembly may call the attention of the Security Council to situations which are likely to endanger international peace and security.

4. The powers of the General Assembly set forth in this Article shall not limit the general scope of Article 10.

Article 12

1. While the Security Council is exercising in respect of any dispute or situation the functions assigned to it in the present Charter, the General Assembly shall not make any recommendation with regard to that dispute or situation unless the Security Council so requests.

2. The Secretary-General, with the consent of the Security Council, shall notify the General Assembly at each session of any matters relative to the maintenance of international peace and security which are being dealt with by the Security Council and shall similarly notify the General Assembly, or the members of the United Na-

tions if the General Assembly is not in session, immediately the Security Council ceases to deal with such matters.

Article 13

1. The General Assembly shall initiate studies and make recommendations for the purpose of:

(a) Promoting international cooperation in the political field and encouraging the progressive development of international law and its codification;

(b) Promoting international cooperation in the economic, social, cultural, educational and health fields and assisting in the realization of human rights and fundamental freedoms for all without distinction as to race, sex, language or religion.

2. The further responsibilities, functions and powers of the General Assembly with respect to matters mentioned in Paragraph 1(b) above are set forth in Chapters IX and X.

Article 14

Subject to the provisions of Article 12, the General Assembly may recommend measures for the peaceful adjustment of any situation, regardless of origin, which it deems likely to impair the general welfare or friendly relations among nations, including situations resulting from a violation of the provisions of the present Charter setting forth the purposes and principles of the United Nations.

Article 15

1. The General Assembly shall receive and consider annual and special reports from the Security Council; these reports shall include an account of the measures that the Security Council has decided upon or taken to maintain international peace and security.

2. The General Assembly shall receive and consider reports from the other organs of the United Nations.

Article 16

The General Assembly shall perform such functions with respect to the international trusteeship system as are assigned to it under Chapters XII and XIII, including the approval of the trusteeship agreements for areas not designated as strategic.

Article 17

1. The General Assembly shall consider and approve the budget of the organization.

2. The expenses of the organization shall be borne by the members as apportioned by the General Assembly.

3. The General Assembly shall consider and approve any financial and budgetary arrangements with specialized agencies re-

ferred to in Article 57 and shall examine the administrative budgets of such specialized agencies with a view to making recommendations to the agencies concerned.

Voting

Article 18

1. Each member of the General Assembly shall have one vote.

2. Decisions of the General Assembly on important questions shall be made by a two-thirds majority of the members present and voting. These questions shall include: recommendations with respect to the maintenance of international peace and security, the election of the non-permanent members of the Security Council, and election of the members of the Economic and Social Council, the election of members of the Trusteeship Council in accordance with Paragraph 1(c) of Article 86, the admission of new members to the United Nations, the suspension of the rights and privileges of membership, the expulsion of members, questions relating to the operation of the trusteeship system and budgetary questions.

3. Decisions on other questions, including the determination of additional categories of questions to be decided by a two-thirds majority, shall be made by a majority of the members present and voting.

Article 19

A member of the United Nations who is in arrears in the payment of its financial contributions to the organization shall have no vote in the General Assembly if the amount of its arrears equals or exceeds the amount of the contributions due from it for the preceding two full years. The General Assembly may, nevertheless, permit such a member to vote if it is satisfied that the failure to pay is due to conditions beyond the control of the member.

Procedure

Article 20

The General Assembly shall meet regular annual sessions and in such special sessions as occasion may require. Special sessions shall be convoked by the Secretary-General at the request of the Security Council or of a majority of the members of the United Nations.

Article 21

The General Assembly shall adopt its own rules of procedure. It shall elect a president for each session.

Article 22

The General Assembly may establish such subsidiary organs as it deems necessary for the performance of its functions.

CHAPTER V

The Security Council**Composition****Article 23**

1. The Security Council shall consist of eleven members of the United Nations. The Republic of China, France, the Union of Soviet Socialist Republics, the United Kingdom of Great Britain and Northern Ireland, and the United States of America, shall be permanent members of the Security Council. The General Assembly shall elect six other members of the United Nations to be non-permanent members of the Security Council, due regard being specially paid, in the first instance to the contribution of members of the United Nations to the maintenance of international peace and security and to the other purposes of the organization, and also to equitable geographical distribution.

2. The non-permanent members of the Security Council shall be elected for a term of two years. In the first election of the non-permanent members, however, three shall be chosen for a term of one year. A retiring member shall not be eligible for immediate re-election.

3. Each member of the Security Council shall have one representative.

Functions and Powers**Article 24**

1. In order to insure prompt and effective action by the United Nations, its members confer on the Security Council primary responsibility for the maintenance of international peace and security, and agree that in carrying out its duties under this responsibility the Security Council acts on their behalf.

2. In discharging these duties the Security Council shall act in accordance with the purposes and principles of the United Nations. The specific powers granted to the Security Council for the discharge of these duties are laid down in Chapters VI, VII, VIII and XII.

3. The Security Council shall submit annual and, when necessary, special reports to the General Assembly for its consideration.

Article 25

The members of the United Nations agree to accept and carry out the decisions of the Security Council in accordance with the present Charter.

Article 26

In order to promote the establishment and maintenance of international peace and security with the least diversion for armaments of the world's human and eco-

nomic resources, the Security Council shall be responsible for formulating, with the assistance of the Military Staff Committee, referred to in Article 47, plans to be submitted to the members of the United Nations for the establishment of a system for the regulation of armaments.

Voting**Article 27**

1. Each member of the Security Council shall have one vote.

2. Decisions of the Security Council on procedural matters shall be made by an affirmative vote of seven members.

3. Decisions of the Security Council on all other matters shall be made by an affirmative vote of seven members including the concurring votes of the permanent members; provided that, in decisions under Chapter VI and under Paragraph 3 of Article 52 a party to a dispute shall abstain from voting.

Procedure**Article 28**

1. The Security Council shall be so organized as to be able to function continuously. Each member of the Security Council shall for this purpose be represented at all times at the seat of the organization.

2. The Security Council shall hold periodic meetings at which each of its members may, if it so desires, be represented by a member of the government or by some other specially designated representative.

3. The Security Council may hold meetings at such places other than the seat of the organization as in its judgment will best facilitate its work.

Article 29

The Security Council may establish such subsidiary organs as it deems necessary for the performance of its functions.

Article 30

The Security Council shall adopt its own rules of procedure, including the method of selecting its president.

Article 31

Any member of the United Nations which is not a member of the Security Council may participate, without vote, in the discussion of any question brought before the Security Council whenever the latter considers that the interests of that member are specially affected.

Article 32

Any member of the United Nations which is not a member of the Security Council or

any state which is not a member of the United Nations, if it is a party to a dispute under consideration by the Security Council, shall be invited to participate, without vote, in the discussion relating to the dispute. The Security Council shall lay down such conditions as it deems just for the participation of a state which is not a member of the United Nations.

CHAPTER VI

Pacific Settlement of Disputes

Article 33

1. The parties to any dispute, the continuance of which is likely to endanger the maintenance of international peace and security, shall, first of all, seek a solution by negotiation, inquiry, mediation, conciliation, arbitration, judicial settlement, resort to regional agencies or arrangements, or other peaceful means of their own choice.

2. The Security Council shall, when it deems necessary, call upon the parties to settle their dispute by such means.

Article 34

The Security Council may investigate any dispute, or any situation which might lead to international friction or give rise to a dispute, in order to determine whether the continuance of the dispute or situation is likely to endanger the maintenance of international peace and security.

Article 35

1. Any member of the United Nations may bring any dispute or any situation of the nature referred to in Article 34 to the attention of the Security Council or of the General Assembly.

2. A state which is not a member of the United Nations may bring to the attention of the Security Council or of the General Assembly any dispute to which it is a party if it accepts in advance, for the purposes of the dispute, the obligations of pacific settlement provided in the present Charter.

3. The proceedings of the General Assembly in respect of matters brought to its attention under this Article will be subject to the provisions of Articles 11 and 12.

Article 36

1. The Security Council may, at any stage of a dispute of the nature referred to in Article 33 or of a situation of like nature, recommend appropriate procedures or methods of adjustment.

2. The Security Council should take into consideration any procedures for the settlement of the dispute which have already been adopted by the parties.

3. In making recommendations under this Article the Security Council should also take into consideration that legal disputes should as a general rule be referred by the parties to the International Court of Justice in accordance with the provisions of the statute of the Court.

Article 37

1. Should the parties to a dispute of the nature referred to in Article 33 fail to settle it by the means indicated in that Article, they shall refer it to the Security Council.

2. If the Security Council deems that the continuance of the dispute is in fact likely to endanger the maintenance of international peace and security, it shall decide whether to take action under Article 36 or to recommend such terms of settlement as it may consider appropriate.

Article 38

Without prejudice to the provisions of Articles 33 to 37 the Security Council may, if all the parties to any dispute so request, make recommendations to the parties with a view to a pacific settlement of the dispute.

CHAPTER VII

Action with Respect to Threats to the Peace, Breaches of the Peace, and Acts of Aggression

Article 39

The Security Council shall determine the existence of any threat to the peace, breach of the peace, or act of aggression and shall make recommendations, or decide what measures shall be taken in accordance with Articles 41 and 42, to maintain or restore international peace and security.

Article 40

In order to prevent an aggravation of the situation, the Security Council may, before making the recommendations or deciding upon the measures provided for in Article 39, call upon the parties concerned to comply with such provisional measures as it deems necessary or desirable. Such provisional measures shall be without prejudice to the rights, claims, or position of the parties concerned. The Security Council shall duly take account of failure to comply with such provisional measures.

Article 41

The Security Council may decide what measures not involving the use of armed force are to be employed to give effect

to its decisions, and it may call upon members of the United Nations to apply such measures. These may include complete or partial interruption of economic relations and of rail, sea, air, postal, telegraphic, radio, and other means of communication, and the severance of diplomatic relations.

Article 42

Should the Security Council consider that measures provided for in Article 41 would be inadequate, or have proved to be inadequate, it may take such action by air, sea or land forces as may be necessary to maintain or restore international peace and security. Such action may include demonstrations, blockade, and other operations by air, sea or land forces of members of the United Nations.

Article 43

1. All members of the United Nations, in order to contribute to the maintenance of international peace and security, undertake to make available to the Security Council, on its call and in accordance with a special agreement or agreements, armed forces, assistance, and facilities, including rights of passage, necessary for the purpose of maintaining international peace and security.

2. Such agreement or agreements shall govern the numbers and types of forces, their degree of readiness and general location, and the nature of the facilities and assistance to be provided.

3. The agreement or agreements shall be negotiated as soon as possible on the initiative of the Security Council. They shall be concluded between the Security Council and members or between the Security Council and groups of members and shall be subject to ratification by the signatory states in accordance with their respective constitutional processes.

Article 44

When the Security Council has decided to use force it shall, before calling upon a member not represented on it to provide armed forces in fulfillment of the obligations assumed under Article 43, invite that member, if the member so desires, to participate in the decisions of the Security Council concerning the employment of contingents of that member's armed forces.

Article 45

In order to enable the United Nations to take urgent military measures, members shall hold immediately available national air force contingents for combined international enforcement action. The strength and degree of readiness of these contingents and plans for their combined action shall be determined, within the limits

laid down in the special agreement or agreements referred to in Article 43, by the Security Council with the assistance of the Military Staff Committee.

Article 46

Plans for the application of armed force shall be made by the Security Council with the assistance of the Military Staff Committee.

Article 47

1. There shall be established a Military Staff Committee to advise and assist the Security Council on all questions relating to the Security Council's military requirements for the maintenance of international peace and security, the employment and command of forces placed at its disposal, the regulation of armaments, and possible disarmament.

2. The Military Staff Committee shall consist of the Chiefs of Staff of the permanent members of the Security Council or their representatives. Any member of the United Nations not permanently represented on the Committee shall be invited by the Committee to be associated with it when the efficient discharge of the Committee's responsibilities requires the participation of that member in its work.

3. The Military Staff Committee shall be responsible, under the Security Council, for the strategic direction of any armed forces placed at the disposal of the Security Council. Questions relating to the command of such forces shall be worked out subsequently.

4. The Military Staff Committee, with the authorization of the Security Council and after consultation with appropriate regional agencies, may establish regional subcommittees.

Article 48

1. The action required to carry out the decisions of the Security Council for the maintenance of international peace and security shall be taken by all the members of the United Nations, or by some of them, as the Security Council may determine.

2. Such decisions shall be carried out by the members of the United Nations directly and through their action in the appropriate international agencies of which they are members.

Article 49

The members of the United Nations shall join in affording mutual assistance in carrying out the measures decided upon by the Security Council.

Article 50

If preventive or enforcement measures against any state are taken by the Security Council, any other state, whether a

member of the United Nations or not, which finds itself confronted with special economic problems arising from the carrying out of those measures shall have the right to consult the Security Council with regard to a solution of those problems.

Article 51

Nothing in the present Charter shall impair the inherent right of individual or collective self-defense, if an armed attack occurs against a member of the United Nations, until the Security Council has taken the measures necessary to maintain international peace and security. Measures taken by members in the exercise of this right of self-defense shall be immediately reported to the Security Council and shall not in any way affect the authority and responsibility of the Security Council under the present Charter to take at any time such action as it deems necessary in order to maintain or restore international peace and security.

CHAPTER VIII

Regional Arrangements

Article 52

1. Nothing in the present Charter precludes the existence of regional arrangements or agencies for dealing with such matters relating to the maintenance of international peace and security as are appropriate for regional action, provided that such arrangements or agencies and their activities are consistent with the purposes and principles of the organization.

2. The members of the United Nations entering into such arrangements or constituting such agencies shall make every effort to achieve pacific settlement of local disputes through such regional arrangements or by such regional agencies before referring them to the Security Council.

3. The Security Council shall encourage the development of pacific settlement of local disputes through such regional arrangements or by such regional agencies either on the initiative of the states concerned or by reference from the Security Council.

4. This Article in no way impairs the application of Articles 34 and 35.

Article 53

1. The Security Council shall, where appropriate, utilize such regional arrangements or agencies for enforcement action under its authority. But no enforcement action shall be taken under regional arrangements or by regional agencies without the authorization of the Security Council, with the exception of measures against any enemy state, as defined in Para-

graph 2 of this Article, provided for pursuant to Article 107, or in regional arrangements directed against renewal of aggressive policy on the part of any such state, until such time as the organization may, on request of the governments concerned, be charged with the responsibility for preventing further aggression by such a state.

2. The term enemy state as used in Paragraph 1 of this Article applies to any state which during the second World War has been an enemy of any signatory of the present Charter.

Article 54

The Security Council shall at all times be kept fully informed of activities undertaken, or in contemplation, under regional arrangements or by regional agencies for the maintenance of international peace and security.

CHAPTER IX

International Economic and Social Cooperation

Article 55

With a view to the creation of conditions of stability and well-being which are necessary for peaceful and friendly relations among nations based on respect for the principle of equal rights and self-determination of peoples, the United Nations shall promote:

(a) Higher standards of living, full employment, and conditions of economic and social progress and development;

(b) Solutions of international economic, social, health, and related problems; and international cultural and educational cooperation; and

(c) Universal respect for, and observance of, human rights and fundamental freedoms for all without distinction as to race, sex, language, or religion.

Article 56

All members pledge themselves to take joint and separate action in cooperation with the organization for the achievement of the purposes set forth in Article 55.

Article 57

1. The various specialized agencies, established by inter-governmental agreement and having wide international responsibilities, as defined in their basic instruments in economic, social, cultural, educational, health and related fields, shall be brought into relationship with the United Nations in accordance with the provisions of Article 63.

2. Such agencies thus brought into relationship with the United Nations are

hereinafter referred to as specialized agencies.

Article 58

The organization shall make recommendations for the coordination of the policies and activities of the specialized agencies.

Article 59

The organization shall, where appropriate, initiate negotiations among the states concerned for the creation of any new specialized agencies required for the accomplishment of the purposes set forth in Article 55.

Article 60

Responsibility for the discharge of the functions of the organization set forth in this Chapter shall be vested in the General Assembly and, under the authority of the General Assembly, in the Economic and Social Council, which shall have for this purpose the powers set forth in Chapter X.

CHAPTER X

Economic and Social Council

Composition

Article 61

1. The Economic and Social Council shall consist of eighteen members of the United Nations elected by the General Assembly.

2. Subject to the provisions of Paragraph 3, six members of the Economic and Social Council shall be elected each year for a term of three years. A retiring member shall be eligible for immediate re-election.

3. At the first election, eighteen members of the Economic and Social Council shall be chosen. The term of office of six members so chosen shall expire at the end of one year, and of six other members at the end of two years, in accordance with arrangements made by the General Assembly.

4. Each member of the Economic and Social Council shall have one representative.

Functions and Powers

Article 62

1. The Economic and Social Council may make or initiate studies and reports with respect to international economic, social, cultural, educational, health, and related matters and may make recommendations with respect to any such matters to the General Assembly, to the members of the United Nations, and to the specialized agencies concerned.

2. It may make recommendations for the purpose of promoting respect for, and observance of, human rights and fundamental freedoms for all.

3. It may prepare draft conventions for submission to the General Assembly, with respect to matters falling within its competence.

4. It may call, in accordance with the rules prescribed by the United Nations, international conferences on matters falling within its competence.

Article 63

1. The Economic and Social Council may enter into agreements with any of the agencies referred to in Article 57, defining the terms on which the agency concerned shall be brought into relationship with the United Nations. Such agreements shall be subject to approval by the General Assembly.

2. It may coordinate the activities of the specialized agencies through consultation with and recommendations to such agencies and through recommendations to the General Assembly and to the members of the United Nations.

Article 64

1. The Economic and Social Council may take appropriate steps to obtain regular reports from the specialized agencies. It may make arrangements with the members of the United Nations and with the specialized agencies to obtain reports on the steps taken to give effect to its own recommendations and to recommendations on matters falling within its competence made by the General Assembly.

2. It may communicate its observations on these reports to the General Assembly.

Article 65

The Economic and Social Council may furnish information to the Security Council and shall assist the Security Council upon its request.

Article 66

1. The Economic and Social Council shall perform such functions as fall within its competence in connection with the carrying out of the recommendations of the General Assembly.

2. It may, with the approval of the General Assembly, perform services at the request of members of the United Nations and at the request of the specialized agencies.

3. It shall perform such other functions as are specified elsewhere in the present Charter or as may be assigned to it by the General Assembly.

Voting

Article 67

1. Each member of the Economic and Social Council shall have one vote.

2. Decisions of the Economic and Social Council shall be made by a majority of the members present and voting.

Procedure

Article 68

The Economic and Social Council shall set up commissions in economic and social fields and for the promotion of human rights, and such other commissions as may be required for the performance of its functions.

Article 69

The Economic and Social Council shall invite any member of the United Nations to participate, without vote, in its deliberations on any matter of particular concern to that member.

Article 70

The Economic and Social Council may make arrangements for representatives of the specialized agencies to participate, without vote, in its deliberations and in those of the commissions established by it, and for its representatives to participate in the deliberations of the specialized agencies.

Article 71

The Economic and Social Council may make suitable arrangements for consultation with non-governmental organizations which are concerned with matters within its competence. Such arrangements may be made with international organizations, and, where appropriate, with national organizations after consultation with the member of the United Nations concerned.

Article 72

1. The Economic and Social Council shall adopt its own rules of procedure, including the method of selecting its president.

2. The Economic and Social Council shall meet as required in accordance with its rules, which shall include provision for the convening of meetings on the request of a majority of its members.

CHAPTER XI

Declaration Regarding Non-Self-Governing Territories

Article 73

Members of the United Nations which have or assume responsibilities for the administration of territories whose peoples have not yet attained a full measure of self-government recognize the principle that the interests of the inhabitants of these territories are paramount, and ac-

cept as a sacred trust the obligation to promote to the utmost, within the system of international peace and security established by the present Charter, the well-being of the inhabitants of these territories, and, to this end:

(a) To insure, with due respect for the culture of the peoples concerned, their political, economic, social, and educational advancement, their just treatment, and their protection against abuses;

(b) To develop self-government, to take due account of the political aspirations of the peoples, and to assist them in the progressive development of their free political institutions, according to the particular circumstances of each territory and its peoples and their varying stages of advancement;

(c) To further international peace and security;

(d) To promote constructive measures of development, to encourage research, and to cooperate with one another and, where and where appropriate, with specialized international bodies with a view to the practical achievement of the social, economic and scientific purposes set forth in this Article; and

(e) To transmit regularly to the Secretary-General for information purposes subject to such limitation as security and constitutional considerations may require statistical and other information of a technical nature relating to economic, social, and educational conditions in the territories for which they are respectively responsible other than those territories to which Chapters XII and XIII apply.

Article 74

Members of the United Nations also agree that their policy in respect of the territories to which this Chapter applies, no less than in respect of their metropolitan areas, must be based on the general principle of good-neighborliness, due account being taken of the interests and well-being of the rest of the world in social, economic and commercial matters.

CHAPTER XII

International Trusteeship System

Article 75

The United Nations shall establish under its authority an international trusteeship system for the administration and supervision of such territories as may be placed thereunder by subsequent individual agreements. These territories are hereinafter referred to as trust territories.

Article 76

The basic objectives of the trusteeship system in accordance with the purposes

of the United Nations laid down in Article 11 of the present Charter, shall be:

(a) To further international peace and security;

(b) To promote the political, economic, social and educational advancement of the inhabitants of the trust territories, and their progressive development toward self-government or independence as may be appropriate to the particular circumstances of each territory and its peoples and the freely expressed wishes of the peoples concerned, and as may be provided by the terms of each trusteeship agreement;

(c) To encourage respect for human rights and for fundamental freedoms for all without distinction as to race, sex, language or religion, and to encourage recognition of the interdependence of the peoples of the world; and

(d) To insure equal treatment in social, economic and commercial matters for all members of the United Nations and their nationals, and also equal treatment for the latter in the administration of justice, without prejudice to the attainment of the foregoing objectives, and subject to the provisions of Article 80.

Article 77

1. The trusteeship system shall apply to such territories in the following categories as may be placed thereunder by means of trusteeship agreements:

(a) Territories now held under mandate;

(b) Territories which may be detached from enemy states as a result of the second World War; and

(c) Territories voluntarily placed under the system by states responsible for their administration.

2. It will be a matter for subsequent agreement as to which territories in the foregoing categories will be brought under the trusteeship system and upon what terms.

Article 78

The trusteeship system shall not apply to territories which have become members of the United Nations, relationship among which shall be based on respect for the principle of sovereign equality.

Article 79

The terms of trusteeship for each territory to be placed under the trusteeship system, including any alteration or amendment, shall be agreed upon by the states directly concerned, including the mandatory power in the case of territories held under mandate by a member of the United Nations, and shall be approved as provided in Articles 83 and 85.

Article 80

1. Except as may be agreed upon in individual trusteeship agreements, made under Articles 77, 79 and 81, placing each territory under the trusteeship system, and until such agreements have been concluded, nothing in this Chapter shall be construed in or of itself to alter in any manner the rights whatsoever of any states or any peoples or the terms of existing international instruments to which members of the United Nations may respectively be parties.

2. Paragraph 1 of this Article shall not be interpreted as giving grounds for delay or postponement of the negotiation and conclusion of agreements for placing mandated and other territories under the trusteeship system as provided for in Article 77.

Article 81

The trusteeship agreement shall in each case include the terms under which the trust territory will be administered and designate the authority which will exercise the administration of the trust territory. Such authority, hereinafter called the administering authority, may be one or more states or the organization itself.

Article 82

There may be designated, in any trusteeship agreement, a strategic area or areas which may include part or all of the trust territory to which the agreement applies, without prejudice to any special agreement or agreements made under Article 43.

Article 83

1. All functions of the United Nations relating to strategic areas, including the approval of the terms of the trusteeship agreements and of their alteration or amendment, shall be exercised by the Security Council.

2. The basic objectives set forth in Article 76 shall be applicable to the people of each strategic area.

3. The Security Council shall, subject to the provisions of the trusteeship agreements and without prejudice to security considerations, avail itself of the assistance of the Trusteeship Council to perform those functions of the United Nations under the trusteeship system relating to political, economic, social and educational matters in the strategic areas.

Article 84

It shall be the duty of the administering authority to insure that the trust territory shall play its part in the maintenance of international peace and security. To this end the administering authority may make use of volunteer forces, facili-

ties, and assistance from the trust territory in carrying out the obligations toward the Security Council undertaken in this regard by the administering authority, as well as for local defense and the maintenance of law and order within the trust territory.

Article 85

1. The functions of the United Nations with regard to trusteeship agreements for all areas not designated as strategic, including the approval of the terms of the trusteeship agreements and of their alteration or amendment, shall be exercised by the General Assembly.

2. The Trusteeship Council, operating under the authority of the General Assembly, shall assist the General Assembly in carrying out these functions.

CHAPTER XIII

The Trusteeship Council

Composition

Article 86

1. The Trusteeship Council shall consist of the following members of the United Nations:

(a) Those members administering trust territories;

(b) Such of those members mentioned by name in Article 23 as are not administering trust territories; and

(c) As many other members elected for three-year terms by the General Assembly as may be necessary to insure that the total number of members of the Trusteeship Council is equally divided between those members of the United Nations which administer trust territories and those which do not.

2. Each member of the Trusteeship Council shall designate one specially qualified person to represent it therein.

Functions and Powers

Article 87

The General Assembly and, under its authority, the Trusteeship Council, in carrying out their functions, may:

(a) Consider reports submitted by the administering authority;

(b) Accept petitions and examine them in consultation with the administering authority;

(c) Provide for periodic visits to the respective trust territories at times agreed upon with the administering authority; and

(d) Take these and other actions in conformity with the terms of the trusteeship agreements.

Article 88

The Trusteeship Council shall formulate a questionnaire on the political, economic, social and educational advancement of the inhabitants of each trust territory, and the administering authority for each trust territory within the competence of the General Assembly shall make an annual report to the General Assembly upon the basis of such questionnaire.

Voting

Article 89

1. Each member of the Trusteeship Council shall have one vote.

2. Decisions of the Trusteeship Council shall be made by a majority of the members present and voting.

Procedure

Article 90

1. The Trusteeship Council shall adopt its own rules of procedure, including the method of selecting its president.

2. The Trusteeship Council shall meet as required in accordance with its rules, which shall include provision for the convening of meetings on the request of a majority of its members.

Article 91

The Trusteeship Council shall, when appropriate, avail itself of the assistance of the Economic and Social Council and of the specialized agencies in regard to matters with which they are respectively concerned.

CHAPTER XIV

The International Court of Justice

Article 92

The International Court of Justice shall be the principal judicial organ of the United Nations. It shall function in accordance with the annexed statute, which is based upon the statute of the Permanent Court of International Justice and forms an integral part of the present Chapter.

Article 93

1. All members of the United Nations are ipso facto parties to the statute of the International Court of Justice.

2. A state which is not a member of the United Nations may become a party to the statute of the International Court of Justice on conditions to be determined in each case by the General Assembly upon the recommendation of the Security Council.

Article 94

1. Each member of the United Nations undertakes to comply with the decision of

the International Court of Justice in any case to which it is a party.

2. If any party to a case fails to perform the obligations incumbent upon it under a judgment rendered by the Court, the other party may have recourse to the Security Council, which may, if it deems necessary, make recommendations or decide upon measures to be taken to give effect to the judgment.

Article 95

Nothing in the present Charter shall prevent members of the United Nations from entrusting the solution of their differences to other tribunals by virtue of agreements already in existence or which may be concluded in the future.

Article 96

1. The General Assembly or the Security Council may request the International Court of Justice to give an advisory opinion on any legal question.

2. Other organs of the United Nations and specialized agencies which may at any time be so authorized by the General Assembly, may also request advisory opinions of the Court on legal questions arising within the scope of their activities.

CHAPTER XV

The Secretariat

Article 97

The Secretariat shall comprise a Secretary General and such staff as the organization may require. The Secretary General shall be appointed by the General Assembly upon the recommendation of the Security Council. He shall be the chief administrative officer of the organization.

Article 98

The Secretary General shall act in that capacity in all meetings of the General Assembly, of the Security Council, of the Economic and Social Council and of the Trusteeship Council, and shall perform such other functions as are entrusted to him by these organs. The Secretary General shall make an annual report to the General Assembly on the work of the organization.

Article 99

The Secretary General may bring to the attention of the Security Council any matter which in his opinion may threaten the maintenance of international peace and security.

Article 100

1. In the performance of their duties the Secretary General and the staff shall not seek or receive instructions from any government or from any other authority external to the organization. They shall

refrain from any action which might reflect on their position as international officials responsible only to the organization.

2. Each member of the United Nations undertakes to respect the exclusively international character of the responsibilities of the Secretary General and the staff, and not to seek to influence them in the discharge of their responsibilities.

Article 101

1. The staff shall be appointed by the Secretary General under regulations established by the General Assembly.

2. Appropriate staffs shall be permanently assigned to the Economic and Social Council, the Trusteeship Council, and, as required, to other organs of the United Nations. These staffs shall form a part of the Secretariat.

3. The paramount consideration in the employment of the staff and in the determination of the conditions of service shall be the necessity of securing the highest standards of efficiency, competence and integrity. Due regard shall be paid to the importance of recruiting the staff on as wide a geographical basis as possible.

CHAPTER XVI

Miscellaneous Provisions

Article 102

1. Every treaty and every international agreement entered into by any member of the United Nations after the present Charter comes into force shall as soon as possible be registered with the Secretariat and published by it.

2. No party to any such treaty or international agreement which has not been registered in accordance with the provisions of Paragraph 1 of this Article may invoke that treaty or agreement before any organ of the United Nations.

Article 103

In the event of a conflict between the obligations of the members of the United Nations under the present Charter and their obligations under any other international agreement, their obligations under the present Charter shall prevail.

Article 104

The organization shall enjoy in the territory of each of its members such legal capacity as may be necessary for the exercise of its functions and the fulfillment of its purposes.

Article 105

1. The organization shall enjoy in the territory of each of its members such privileges and immunities as are necessary for the fulfillment of its purposes.

2. Representatives of the members of the United Nations and officials of the organization shall similarly enjoy such privileges and immunities as are necessary for the independent exercise of their functions in connection with the organization.

3. The General Assembly may make recommendations with a view to determining the details of the application of Paragraphs 1 and 2 of this Article or may propose conventions to the members of the United Nations for this purpose.

CHAPTER XVII

Transitional Security Arrangements

Article 106

Pending the coming into force of such special agreements referred to in Article 43, as in the opinion of the Security Council enable it to begin the exercise of its responsibilities under Article 42, the parties to the Four-Nation Declaration, signed at Moscow, Oct. 30, 1943, and France, shall, in accordance with the provisions of Paragraph 5 of that Declaration, consult with one another and, as occasion requires, with other members of the United Nations with a view to such joint action on behalf of the organization as may be necessary for the purpose of maintaining international peace and security.

Article 107

Nothing in the present Charter shall invalidate or preclude action in relation to any state which during the second World War has been an enemy of any signatory to the present Charter, taken or authorized as a result of that war by the governments having responsibility for such action.

CHAPTER XVIII

Amendments

Article 108

Amendments to the present Charter shall come into force for all members of the United Nations when they have been adopted by a vote of two-thirds of the members of the General Assembly and ratified in accordance with their respective constitutional processes by two-thirds of the members of the United Nations, including all the permanent members of the Security Council.

Article 109

1. A general conference of the members of the United Nations for the purpose of reviewing the present Charter may be held at a date and place to be fixed by a two-thirds vote of the members of the General Assembly and by a vote of any seven members of the Security Council. Each member of the United Nations shall have one vote in the conference.

2. Any alteration of the present Charter recommended by a two-thirds vote of the conference shall take effect when ratified in accordance with their respective constitutional processes by two-thirds of the members of the United Nations including all the permanent members of the Security Council.

3. If such a conference has not been held before the tenth annual session of the General Assembly following the coming into force of the present Charter, the proposal to call such a conference shall be placed on the agenda of that session of the General Assembly, and the conference shall be held if so decided by a majority vote of the members of the General Assembly and by a vote of any seven members of the Security Council.

CHAPTER XIX

Ratification and Signature

Article 110

1. The present Charter shall be ratified by the signatory states in accordance with their respective constitutional processes.

2. The ratifications shall be deposited with the Government of the United States of America, which shall notify all the signatory states of each deposit as well as the Secretary General of the organization when he has been appointed.

3. The present Charter shall come into force upon the deposit of ratifications by the Republic of China, France, the Union of Soviet Socialist Republics, the United Kingdom of Great Britain and Northern Ireland, and the United States of America, and by a majority of the other signatory states. A protocol of the ratifications deposited shall thereupon be drawn up by the Government of the United States of America which shall communicate copies thereof to all the signatory states.

4. The states signatory to the present Charter which ratify it after it has come into force will become original members of the United Nations on the date of the deposit of their respective ratifications.

Article 111

The present Charter, of which the Chinese, French, Russian, English and Spanish texts are equally authentic, shall remain deposited in the archives of the Government of the United States of America. Duly certified copies thereof shall be transmitted by that Government to the Governments of the other signatory states.

In faith whereof the representatives of the Governments of the United Nations have signed the present Charter.

Done at the city of San Francisco the twenty-sixth day of June, one thousand nine hundred and forty-five.

THE UNITED NATIONS

Twenty-six nations at war against the Axis signed the original Declaration by United Nations at Washington on January 1, 1942. Members admitted later are shown in italics with the year of their admission.

Members of the Security Council are indicated by the letters SC followed by the year their membership expires.

Members of the Economic and Social Council are indicated by the letters ESC followed by the year membership expires.

Nations which were at any time members of the League of Nations are indicated by the letters L; if they ceased to be members, this fact is indicated either by *withdrew* or *expelled*.

Country	Year admitted	Security Council membership	Economic and Social Council membership	League of Nations membership
<i>Afghanistan</i>	1946	—	—	L
<i>Argentina</i>	1945	—	—	L
Australia	—	SC 1948	—	L
Belgium	—	SC 1949	ESC 1949	L
<i>Bolivia</i>	1943	—	—	L
<i>Brazil</i>	1943	SC 1948	—	L (withdrew 1926)
<i>Byelorussia</i>	1945	—	ESC 1950	—
Canada	—	—	ESC 1949	L
<i>Chile</i>	1945	—	ESC 1949	L (withdrew 1938)
China	—	SC (permanent)	ESC 1949	L
<i>Colombia</i>	1943	SC 1949	—	L
Costa Rica	—	—	—	L (withdrew 1924)
Cuba	—	—	ESC 1948	L
Czechoslovakia	—	—	ESC 1948	L (occupied 1939)
<i>Denmark</i>	1945	—	—	L
Dominican Republic	—	—	—	L
<i>Ecuador</i>	1945	—	—	L
Egypt	—	—	—	L
El Salvador	1945	—	—	L (withdrew 1937)
<i>Ethiopia</i>	1942	—	—	L
<i>France</i>	1944	SC (permanent)	ESC 1949	L
Greece	—	—	—	L
Guatemala	—	—	—	L (withdrew 1936)
Haiti	—	—	—	L
Honduras	—	—	—	L (withdrew 1936)
<i>Iceland</i>	1946	—	—	—
India	—	—	ESC 1948	L
<i>Iran</i>	1943	—	—	L
<i>Iraq</i>	1943	—	—	L
<i>Lebanon</i>	1945	—	ESC 1950	—
<i>Liberia</i>	1944	—	—	L
Luxembourg	—	—	—	L
<i>Mexico</i>	1942	—	—	L
Netherlands	—	—	ESC 1949	L
New Zealand	—	—	ESC 1950	L
Nicaragua	—	—	—	L (withdrew 1936)
Norway	—	—	ESC 1948	L
Panama	—	—	—	L
<i>Paraguay</i>	1945	—	—	L (withdrew 1937)
<i>Peru</i>	1945	—	ESC 1949	L (withdrew 1939)
<i>Philippines</i>	1942	—	—	—
Poland	—	SC 1948	—	L
<i>Saudi Arabia</i>	1945	—	—	—
<i>Siam</i>	1946	—	—	—
South Africa	—	—	—	L
<i>Sweden</i>	1946	—	—	L
<i>Syria</i>	1945	SC 1949	—	—
<i>Turkey</i>	1945	—	ESC 1950	L
<i>Ukraine</i>	1945	—	—	—
United Kingdom	—	SC (permanent)	ESC 1948	L
U.S.S.R.	—	SC (permanent)	ESC 1948	L (expelled 1939)
United States	—	SC (permanent)	ESC 1950	—
<i>Uruguay</i>	1945	—	—	L
<i>Venezuela</i>	1945	—	ESC 1950	L (withdrew 1938)
<i>Yugoslavia</i>	—	—	—	L

NONMEMBER NATIONS

Country	World War II status*	League of Nations membership
Albania	E	L (1939)
Austria	E	L (1938) (assimilated by Germany)
Bulgaria	E	L
Eire	N	L
Estonia	O	L
Finland	E	L
Germany	E	L (withdrew 1933)
Hungary	E	L (withdrew 1939)
Italy	E	L (withdrew 1937)
Japan	E	L (withdrew 1933)
Latvia	O	L
Liechtenstein	O	—
Lithuania	O	L
Portugal	N	L
Rumania	E	L
Spain	N	L (1939)
Switzerland	N	L
Vatican City	N	—

*N—Neutral during war; E—Enemy; O—Occupied.

Delegation Chiefs to the United Nations General Assembly

ARGENTINA	H. E. Dr. Jose Arce, Ambassador
AUSTRALIA	Norman J. O. Makin, Ambassador
BELGIUM	H. E. Mr. Paul-Henri Spaak, Minister of Foreign Affairs
BOLIVIA	H. E. Sr. Adolfo Costa Durels
BRAZIL	H. E. M. P. Leao Velloso
BYELORUSSIA	Kuzma Kisselev, Foreign Minister
CANADA	The Rt. Hon. Louis S. St. Laurent, Secretary of State for External Affairs, Minister of Justice for Canada
CHILE	H. E. Sr. Don Felix Nieto del Rio
CHINA	H. E. Dr. V. K. Wellington Koo, Ambassador
COLOMBIA	H. E. Dr. Alfonso López, former President of Colombia
COSTA RICA	H. E. Sr. Francisco de Paula Gutierrez, Ambassador
CUBA	H. E. Dr. Guillermo Belt, Ambassador
CZECHOSLOVAKIA	H. E. Mr. Jan Masaryk, Minister of Foreign Affairs
DENMARK	H. E. Mr. Gustav Rasmussen, Minister of Foreign Affairs
DOMINICAN REPUBLIC	H. E. Sr. Emilio García Godoy, Ambassador
ECUADOR	H. E. Dr. Francisco Illescas, Ambassador
EGYPT	H. E. Mohamed Hussein Heykel Pasha, President of the Senate
ETHIOPIA	Blatta Ephrem T. Medhen, Minister to the United Kingdom
FRANCE	Alexandre Parodi
GREECE	H. E. Mr. Constantin Tsaldaris, Prime Minister and Minister of Foreign Affairs
GUATEMALA	H. E. Dr. Eugenio Silva Pena, Minister of Foreign Affairs
HAITI	H. E. Mr. Joseph Charles
HONDURAS	H. E. Dr. Tiburcio Carias, Jr.
INDIA	Mrs. Vijaya Lakshmi Pandit, Minister of Health of United Provinces
IRAN	His Highness Ahmad Ghavam, Prime Minister and Minister of Foreign Affairs
LEBANON	H. E. Mr. Camille Chamoun, Minister to the United Kingdom
LIBERIA	Hon. C. Abayomi Cassell, Attorney General of Liberia
LUXEMBOURG	H. E. Mr. Joseph Bech, Honorary Minister of State, Minister of Foreign Affairs
MEXICO	Dr. Francisco Castillo Nájera, Foreign Minister
NETHERLANDS	H. E. Dr. Baron C. G. W. H. van Boetzlaer van Oosterhout, Minister for Foreign Affairs
NEW ZEALAND	H. E. Sir Carl August Berendsen, Minister P and E
NICARAGUA	H. E. Dr. Mariano Arguello-Vargas, former Minister of Foreign Affairs

Delegation Chiefs to the United Nations General Assembly—(cont.)

NORWAY	H. E. Mr. Halvard M. Lange, Minister of Foreign Affairs
PANAMA	H. E. Dr. Ricardo J. Alfaro, Minister of Foreign Affairs
PARAGUAY	Dr. Cesar R. Acosta, Chargé d'Affaires of the Embassy
PERU	H. E. Sr. Alberto Ulloa, Chairman of the Foreign Relations Committee of the Peruvian Senate
PHILIPPINES	H. E. Brig. Gen. Carlos P. Romulo
POLAND	Wincenty Rzymowski, Foreign Minister
SAUDI ARABIA	His Royal Highness Prince Faisal al Saud, Minister of Foreign Affairs
SYRIA	H. E. M. Faris El Khoury, President of Parliament
TURKEY	H. E. Huseyin Ragıp Baydur, Ambassador
UKRAINIAN S. S. R.	H. E. Mr. D. Z. Manuillsky
UNION OF SOUTH AFRICA	Field Marshal The Right Hon. J. C. Smuts, Prime Minister and Minister for External Affairs
UNION OF SOVIET SOCIALIST REPUBLICS	H. E. Mr. Viacheslav M. Molotov, Foreign Minister
UNITED KINGDOM	The Rt. Hon. Ernest Bevin, M.P., Secretary of State for Foreign Affairs

Permanent

UNITED STATES	Senator Warren R. Austin
	Senator Tom Connally
	Senator Arthur H. Vandenberg
	Mrs. Eleanor Roosevelt
	Representative Sol Bloom

Alternates

	Rep. Charles A. Eaton
	Rep. Helen Gahagan Douglas
	Mr. John Foster Dulles
	Mr. Adlai Stevenson
URUGUAY	H. E. Sr. Juan Carlos Blanco, Ambassador
VENEZUELA	H. E. Dr. Carlos Eduardo Stolk
YUGOSLAVIA	H. E. Mr. Stanoje Simich, Minister for Foreign Affairs

Delegates to the Security Council of the United Nations

AUSTRALIA	The Rt. Hon. Dr. H. V. Evatt
BRAZIL	H. E. Pedro Leao Velloso
CHINA	Dr. Quo, Tai-chi
EGYPT	Mahmoud Bey Fawzi
FRANCE	Mr. Alexandre Parodi
MEXICO	Dr. Luis Padilla Nervo
NETHERLANDS	Dr. E. N. Van Kleffens
POLAND	Dr. Oskar Lange
UNITED KINGDOM	The Rt. Hon. Sir Alexander Cadogan
UNION OF SOVIET SOCIALIST REPUBLICS	Mr. Andrei A. Gromyko
UNITED STATES	Warren R. Austin

United Nations Military Delegations (Military Staff Committee)

	Air	Army	Navy
CHINA	General Mow Pong Tsu	General Chang Chen	Rear Admiral Liu Ten-fu
FRANCE	Air Marshal M. Valin	Maj. General Pierre Billotte	Vice Admiral Raymond Fenard
UNITED KINGDOM	Air Chief Marshal Sir Guy Garrod	General Sir Edwin L. Morriss	Admiral Sir Henry Moore
U. S. S. R.	Lt. General Andrei R. Sharapov	Lt. General A. F. Vasiliev	Vice Admiral L. I. Bogdenko
UNITED STATES	General G. C. Kenney	Lt. General M. B. Ridgway	Admiral R. K. Turner

The World Food Problem

Among the great problems caused by World War II were those of starvation and famine. This necessitated the establishment of many international organizations within the United Nations. Outstanding among these was UNRRA, but that could only concern itself with a temporary solution of the problem. Therefore, the United Nations also created a Food and Agriculture Organization with S. M. Bruce as the

chairman of the preparatory commission. This commission as the result of a conference at Copenhagen established as its objective the following: developing and organizing production, distribution and utilization of the basic foods to provide diets on a health standard for the peoples of all nations; stabilizing agricultural prices at levels fair to producers and consumers alike.

U N R R A Aid

Source: Report from United Nations Relief and Rehabilitation Administration.

Shipments Program Through Dec. 31, 1946 in Thousand Tons

	Food	Clothing textiles & footwear ¹	Medical and sanita- tion	Agricul- tural rehabili- tation	Indus- trial rehabili- tation ²	Unclassi- fied ³	Total
Greece	1,306	27	9	287	693	727	3,049
Yugoslavia	1,084	73	20	161	695	352	2,385
Albania	67	3	2	17	42	25	156
Poland	806	80	27	386	493	...	1,792
Czechoslovakia ..	608	40	24	267	404	...	1,343
Italy	1,844	105	14	410	7,238	...	9,611
Austria	365	4	1	164	47	177	758
White Russia ...	72	6	1	44	22	...	145
Ukraine	209	19	2	41	112	...	383
China ⁴	1,094	155	37	558	907	...	2,751
Other programs ..	57	90	5	6	4	34	196
Total	7,512	602	142	2,341	10,657	1,315	22,569

¹Includes textile raw materials.

²Includes coal and all raw materials except textile raw materials.

³Military shipments and items awaiting specification.

⁴Through 31 March 1947.

Shipments Program Through Dec. 31, 1946 in Million Dollars¹

	Food	Clothing textiles & footwear ²	Medical and sanitation	Agricul- tural rehabili- tation	Indus- trial rehabili- tation ³	Unclassi- fied ⁴	Grand Total
Greece	164.0	35.0	10.3	50.8	40.9	57.0	358.0
Yugoslavia	139.6	75.9	21.6	40.0	109.4	43.0	429.5
Albania	5.5	5.4	1.9	6.6	7.1	2.0	28.5
Poland	180.5	84.5	30.0	80.0	99.0	...	474.0
Czechoslovakia ..	107.0	29.5	26.5	33.4	73.6	...	270.0
Italy	195.7	55.9	16.0	29.5	127.4	.5	425.0
Austria	54.0	2.0	1.5	19.1	9.0	31.7	117.3
White Russia	28.9	7.4	1.2	5.7	17.8	...	61.0
Ukraine	100.2	21.7	2.8	17.4	46.9	...	189.0
China ⁵	131.5	95.9	41.3	80.0	186.3	...	535.0
Other programs	14.3	23.0	2.5	1.0	2.5	15.1	58.3
Total	1,121.2	436.2	155.6	363.5	719.9	149.3	2,945.6

¹Values, f.a.s.

²Includes textile raw materials.

³Includes coal and all raw materials except textile raw materials.

⁴Military shipments and items awaiting specification.

⁵Through 31 March, 1947.

Agenda of the United Nations General Assembly

The United Nations General Assembly reassembled at Lake Success, N. Y., on October 23, 1946. By October 31st, it prepared its agenda and divided the work ahead among six main committees. All the committees were to meet at Lake Success.

The *Political and Security Committee* was assigned the following tasks: to consider the problem of admission of new members to the United Nations; to study the reports of the Security Council; the method of voting in the Security Council; the problem of the veto privilege or its elimination, to consider the problem of troops of the United Nations on non-enemy territory. Declarations on the rights and duties of states were to be drafted as well as a declaration on fundamental human rights and freedoms. It was to report back on the Russian disarmament proposals. Lastly, it was to concern itself with a five-power letter on Spain.

The second committee, the *Economic and Financial*, was given the task of studying the report by Secretary General Trygve Lie on action in the matter of world shortage of cereal. It was to study the report given by Fiorello H. LaGuardia, Director General of the UNNRA, and the report of the Economic and Social Council on the economic reconstruction of devastated areas.

The third committee, the *Social, Humanitarian and Cultural*, was to study the report of the Economic and Social Council on the question of refugees and displaced persons and to reconsider the constitution of the International Refugee Organization. The resolution of the Economic and Social Council regarding the transfer of welfare activities of UNNRA was referred to it, as was that regarding the establishment of an International Children's Emergency Fund. They were given resolutions about a World Health Organization and national Red Cross societies. They were to study the problem of the assumption of functions and powers previously exercised by the League of Nations on narcotic drugs. They were to organize an International Press Conference. The Danish resolution on the equality of women and a French proposal for summoning a preparatory conference of experts on housing and town planning was submitted to them. Together with the Economic and Financial Council, they were to study relations between the United Nations and specialized agencies. In cooperation with the legal committee, they were to consider agreements concluded with specialized agencies and the transfer of other functions of the League of Nations.

The fourth committee, the *Trusteeship*, was to receive the report of the Secretary General on trusteeship agreements. It was

given statements by the Union of South Africa on the outcome on their consultations with the peoples of South West Africa as to the future status of the mandated territory and implementation of the wishes thus expressed. To it was submitted the report by members concerning non-self-governing territories.

The fifth committee, *Administrative and Budgetary*, was to consider those articles of the International Refugee Organization dealing with finances. It was to consider and approve the first and second annual budgets of the organization for the years 1946 and 1947. The reports on the organization and administration of the Secretariat was to be studied in conjunction with the Legal Committee, as was the report on budgetary and financial arrangements and apportionment of expenses. The resolution submitted by the Economic and Social Council regarding the utilization of the property rights of the League of Nations in the International Institute of Intellectual Cooperation was referred to this committee, as was the transfer to the United Nations of certain assets of the League of Nations. An election of members of the advisory committee on administrative and budgetary questions was held.

The sixth committee, the *Legal Committee*, had as its function consideration of the following topics: changes in the provisional rules of procedure required to give effect to decisions taken regarding terms of office of members of councils; immunities and privileges for the judges and staff officials of the International Court of Justice; regulations regarding the registration of treaties; the legality of requesting advisory opinions by the Council from the International Court of Justice; the adoption of an official emblem of the United Nations; the progressive development of International Law and its codification. It was to consider a joint report of the Secretary General and the Committee on Negotiations with the competent authorities of the United States regarding the arrangements required as a result of the establishment of the seat of the United Nations in the United States of America. In conjunction with the Administrative and Budgetary Committee, it was to study the recommendations concerning the administration of the International Court of Justice and was to approve agreements concerning the premises at the Peace Palace at The Hague.

The chief function of the General Committee was to determine a system or technique whereby the time of the General Assembly could be most economically employed. In all, there was a total of fifty-six items on the agenda of this most important meeting.

United Nations Security Council, 1947

As a result of the election in the General Assembly of the United Nations at Flushing Meadow, N. Y., on November 19,

1946, the membership of the United Nations Security Council, beginning January 1, 1947, was set as follows:

Australia
(Until 1948)

Belgium
(Until 1949)

Brazil
(Until 1948)

China
(Permanent)

Colombia
(Until 1949)

France
(Permanent)

Poland
(Until 1948)

Syria
(Until 1949)

U. S. S. R.
(Permanent)

United Kingdom
(Permanent)

United States
(Permanent)

Belgium, Colombia and Syria were chosen as the new members to replace Egypt, Mexico and The Netherlands, whose terms expired December 31, 1946. Blocs of nations seemed to have developed which

more or less combined to ensure the election of a member they particularly desired. Thus, the Latin-American bloc concentrated on the election of Colombia and the Arab bloc on the election of Syria.

Vetoes in the Security Council, 1946

The outstanding examples of the use of the veto power show that the Soviet Union used the veto power about eight times, the United States and the United Kingdom, twice each, and France, once.

On February 16th, Vice Foreign Minister Vishinsky of U. S. S. R., vetoed a United States proposal that would in effect have dismissed the Soviet charges against Britain and France for keeping troops in Syria and Lebanon.

On June 18th, at Hunter College, N. Y., Soviet Representative Gromyko vetoed a sub-committee's proposal on investigating the Spanish question, and again on June 26th, a British-Australian proposal to

keep the Spanish question on the agenda without prejudice to the rights of the General Assembly.

On August 29th, at Lake Success, the Soviet Union vetoed the application to membership in the United Nations of Trans-Jordan, Eire and Portugal. On the same day, the United States and Great Britain vetoed the admission of Albania and Outer Mongolia.

On June 10th, Mr. Gromyko vetoed a resolution inviting Canada to be present during a report by the Atomic Energy Commission, but did not insist on his veto when nine nations voted in the affirmative.

The Fourteen Points

Wilson's Address to Congress January 8, 1918

GENTLEMEN of the Congress:

It will be our wish and purpose that the processes of peace, when they are begun, shall be absolutely open and that they shall involve and permit henceforth no secret understandings of any kind. The day of conquest and aggrandizement is gone by; so is also the day of secret covenants entered into in the interest of particular governments and likely at some unlooked-for moment to upset the peace of the world. It is this happy fact, now clear to the view of every public man whose thoughts do not still linger in an age that is dead and gone, which makes it possible for every nation whose purposes are consistent with justice and the peace of the world to avow now or at any other time the objects it has in view.

We entered this war because violations of right had occurred which touched us to the quick and made the life of our own people impossible unless they were corrected and the world secured once for all against their recurrence. What we demand in this war, therefore, is nothing peculiar to ourselves. It is that the world be made fit and safe to live in; and particularly that it be made safe for every peace-loving nation which, like our own, wishes to live its own life, determine its own institutions, be assured of justice and fair dealing by the other peoples of the world as against force and selfish aggression. All the peoples of the world are in effect partners in this interest, and for our own part we see very clearly that unless justice be done to others it will not be done to us. The pro-

gram of the world's peace, therefore, is our program; and that program, the only possible program, as we see it, is this:

I. Open covenants of peace, openly arrived at, after which there shall be no private international understandings of any kind but diplomacy shall proceed always frankly and in the public view.

II. Absolute freedom of navigation upon the seas, outside territorial waters, alike in peace and in war, except as the seas may be closed in whole or in part by international action for the enforcement of international covenants.

III. The removal, so far as possible, of all economic barriers and the establishment of an equality of trade conditions among all the nations consenting to the peace and associating themselves for its maintenance.

IV. Adequate guarantees given and taken that national armaments will be reduced to the lowest point consistent with domestic safety.

V. A free, open-minded, and absolutely impartial adjustment of all colonial claims, based upon a strict observance of the principle that in determining all such questions of sovereignty the interests of the populations concerned must have equal weight with the equitable claims of the government whose title is to be determined.

VI. The evacuation of all Russian territory and such a settlement of all questions affecting Russia as will secure the best and freest cooperation of the other nations of the world in obtaining for her an unhampered and unembarrassed opportunity for the independent determination of her own political development and national policy and assure her of a sincere welcome into the society of free nations under institutions of her own choosing; and, more than a welcome, assistance also of every kind that she may need and may herself desire. The treatment accorded Russia by her sister nations in the months to come will be the acid test of their good will, of their comprehension of her needs as distinguished from their own interests, and of their intelligent and unselfish sympathy.

VII. Belgium, the whole world will agree, must be evacuated and restored, without any attempt to limit the sovereignty which she enjoys in common with all other free nations. No other single act will serve as this will serve to restore confidence among the nations in the laws which they have themselves set and determined for the government of their relations with one another. Without this healing act the whole structure and validity of international law is forever impaired.

VIII. All French territory should be freed and the invaded portions restored, and the wrong done to France by Prussia in 1871 in the matter of Alsace-Lorraine, which has unsettled the peace of the world for nearly fifty years, should be righted, in order that peace may once more be made secure in the interest of all.

IX. A readjustment of the frontiers of Italy should be effected along clearly recognizable lines of nationality.

X. The peoples of Austria-Hungary, whose place among the nations we wish to see safeguarded and assured, should be accorded the freest opportunity of autonomous development.

XI. Rumania, Serbia, and Montenegro should be evacuated; occupied territories restored; Serbia accorded free and secure access to the sea; and the relations of the several Balkan states to one another determined by friendly counsel along historically established lines of allegiance and nationality; and international guarantees of the political and economic independence and territorial integrity of the several Balkan states should be entered into.

XII. The Turkish portions of the present Ottoman Empire should be assured a secure sovereignty, but the other nationalities which are now under Turkish rule should be assured an undoubted security of life and an absolutely unmolested opportunity of autonomous development, and the Dardanelles should be permanently opened as a free passage to the ships and commerce of all nations under international guarantees.

XIII. An independent Polish state should be erected which should include the territories inhabited by indisputably Polish populations, which should be assured a free and secure access to the sea, and whose political and economic independence and territorial integrity should be guaranteed by international covenant.

XIV. A general association of nations must be formed under specific covenants for the purpose of affording mutual guarantees of political independence and territorial integrity to great and small states alike.

In regard to these essential rectifications of wrong and assertions of right we feel ourselves to be intimate partners of all the governments and peoples associated together against the Imperialists. We cannot be separated in interest or divided in purpose. We stand together until the end.

For such arrangements and covenants we are willing to fight and to continue to fight until they are achieved; but only because we wish the right to prevail and desire a just and stable peace such as can

be secured only by removing the chief provocations to war, which this program does not remove. We have no jealousy of German greatness, and there is nothing in this program that impairs it. We grudge her no achievement or distinction of learning or of pacific enterprise such as have made her record very bright and very enviable. We do not wish to injure her or to block in any way her legitimate influence or power. We do not wish to fight her either with arms or with hostile arrangements of trade if she is willing to associate herself with us and the other peace-loving nations of the world in covenants of justice and law and fair dealing. We wish her only to accept a place of equality among the peoples of the world,—the new world in which we now live,—instead of a place of mastery.

Neither do we presume to suggest to her any alteration or modification of her institutions. But it is necessary, we must frankly say, and necessary as a preliminary to any intelligent dealings with her on our part, that we should know whom her

spokesmen speak for when they speak to us, whether for the Reichstag majority or for the military party and the men whose creed is imperial domination.

We have spoken now, surely, in terms too concrete to admit of any further doubt or question. An evident principle runs through the whole program I have outlined. It is the principle of justice to all peoples and nationalities, and their right to live on equal terms of liberty and safety with one another, whether they be strong or weak. Unless this principle be made its foundation no part of the structure of international justice can stand. The people of the United States could act upon no other principle; and to the vindication of this principle they are ready to devote their lives, their honor, and everything that they possess. The moral climax of this the culminating and final war for human liberty has come, and they are ready to put their own strength, their own highest purpose, their own integrity and devotion to the test.

The Atlantic Charter

(In a dramatic meeting off Newfoundland, August 14, 1941, President Roosevelt and Winston Churchill formulated this statement of common war aims.)

The President of the United States of America and the Prime Minister, Mr. Churchill, representing His Majesty's Government in the United Kingdom, being met together, deem it right to make known certain common principles in the national policies of their respective countries on which they base their hopes for a better future for the world.

FIRST, their countries seek no aggrandizement, territorial or other;

SECOND, they desire to see no territorial changes that do not accord with the freely expressed wishes of the peoples concerned;

THIRD, they respect the right of all peoples to choose the form of government under which they will live; and they wish to see sovereign rights and self government restored to those who have been forcibly deprived of them;

FOURTH, they will endeavor, with due respect for their existing obligations, to further the enjoyment by all States, great or small, victor or vanquished, of access, on equal terms, to the trade and to the raw materials of the world which are needed for their economic prosperity;

FIFTH, they desire to bring about the fullest collaboration between all nations in the economic field with the object of securing, for all, improved labor standards, economic advancement and social security;

SIXTH, after the final destruction of Nazi tyranny, they hope to see established a peace which will afford to all nations the means of dwelling in safety within their own boundaries, and which will afford assurance that all men in all lands may live out their lives in freedom from fear and want;

SEVENTH, such a peace should enable all men to traverse the high seas and oceans without hindrance;

EIGHTH, they believe that all the nations of the world, for realistic as well as spiritual reasons, must come to the abandonment of the use of force. Since no future peace can be maintained if land, sea or air armaments continue to be employed by nations which threaten, or may threaten, aggression outside of their frontiers, they believe, pending the establishment of a wider and permanent system of general security, that the disarmament of such nations is essential. They will likewise aid and encourage all other practicable measures which will lighten for peace-loving peoples the crushing burden of armaments.

FRANKLIN D. ROOSEVELT
WINSTON S. CHURCHILL

THE OTHER NATIONS OF THE WORLD



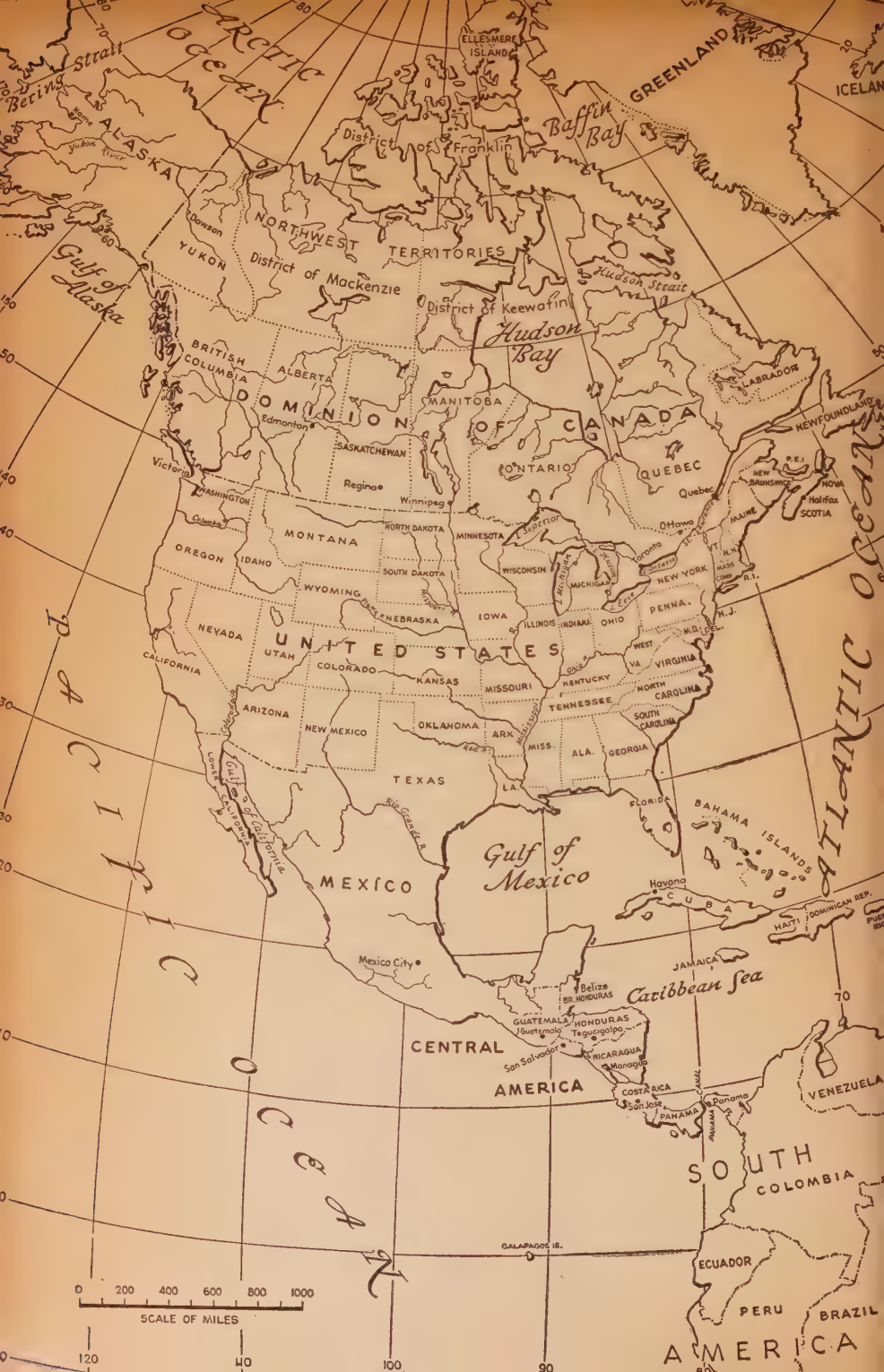
A GUIDE TO THE MAIN HISTORICAL,
POLITICAL, GEOGRAPHIC, ECONOMIC
AND SOCIAL CONDITIONS



Prepared under the direction of

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Editor-in-chief, *Encyclopaedia Britannica*



THE OTHER NATIONS OF THE WORLD

Afghanistan (Kingdom)

Area: 250,000 square miles.

Population (est. 1940): 10,000,000.

Density per square mile: 40.

Ruler: Mohammed Zaher Shah.

Premier: Shah Mahmoud Khan Ghazi.

Principal cities (est.): Kabul, 80,000 (capital); Kandahar, 60,000 (trading center); Herat, 50,000 (farming).

Monetary unit: Afghani.

Racial stock (est.): Afghan, 35%; Tadchik, 21%; Mongolian, 8.5%; Others, 35.5%.

Languages: Persian, Pushtu, Turki.

Religion: Mohammedan.

Afghanistan, landlocked between India and Iran in western Asia, did not become a distinct political entity until 1747. Before that, it was variously a cluster of small states under nominal Arab rule, or part of Mongol or Moghul empires, or a dismembered object parceled among India, Persia and the Uzbeks.

In the 19th century it was recognized as a British sphere of influence, though the British had to send troops in more than once to enforce Afghan friendliness. In 1880 the British recognized Abdur Rahman Khan as Emir and gave him an annual subsidy of more than \$500,000 to delegate his foreign relations to India. His son, Habibullah, succeeded him in 1901 and kept Afghanistan neutral in World War I despite strong pressure of pro-Turkish elements. On Aug. 8, 1919, a treaty was signed making Afghanistan free and independent of all British control. The country maintained strict neutrality in World War II.

Afghanistan's present sovereign, Mohammed Zaher Shah, was born on Oct. 15, 1914, was married in 1931 to his cousin, Umairah. They have two sons and two daughters.

Under the 1932 constitution, Afghanistan is a constitutional monarchy, with authority vested in the sovereign and parliament, which has a senate of forty-five members named for life by the sovereign and a national assembly of 109 elected members. Executive power is exercised by the sovereign and cabinet headed by the prime minister. Each of the nine provinces is headed by a governor. Military service is compulsory from the age of eighteen to forty, with an initial training period of two years. Peacetime army strength is about 90,000, supplemented by tribal bands. There is a small air force.

Education is nominally compulsory. Primary schools exist in many parts of the country but secondary schools only in Kabul and the provincial capitals. In 1940 there were 130 primary, four secondary, and thirteen military schools, and a normal school and a university, both in Kabul.

Afghanistan is a stronghold of Islam. The official language is Persian, but Pushtu is more widely spoken, especially in the west, while Turki is the popular tongue in the north.

The greater part of the country is mountainous and rocky but farming is carried on successfully in the fertile valleys and plains, sometimes with the aid of irrigation. Two crops a year are usually grown. Important ones include the asafetida plant, castor beans, cereals, fruit, madder, tobacco, cotton and vegetables. Wheat is the staple food. Many of the people are pastoral and there is considerable grazing land. The fat-tailed indigenous sheep is the principal source of meat, wearing apparel and skins for export. Camels, humped cattle, oxen and asses are numerous.

There are small chemical, clothing, leather, textile and woodworking factories in Kabul. Important manufactures include silk, felt, sheepskin coats, soap, carpets and boots. Additional factories are being erected by government monopolies; the latter includes karakul, sugar, cotton, vehicles and heat and light.

Exports in 1938 included 915,054 karakul skins, 2,727 tons of cotton, 5,699 tons of wool, 737 rugs, 108,747 square yards of carpet, 27,788 tons of dried raisins and apricots, 18,621 tons of fruit and 6,540 tons of nuts. Most of the trade is carried on through India but cattle and foodstuffs are exported to Soviet territory whose imports into northern Afghanistan include cotton and wool. Trade with Iran is negligible. Soviet trade with Afghanistan is handled by *Vostokintorg*, a Soviet government trade monopoly.

Afghanistan has no railways. Transport is generally by camel or pack horse. The principal trade routes are through the Khyber and Khojak Passes to India, and to the Uzbek and Turkmen Soviet Socialist Republics. There are about 2,265 miles of roads suitable for motor transport connecting the chief towns.

Revenue and expenditure amount to about \$45,000,000 a year. The revenue

comes from customs, land taxes and government monopolies.

Afghanistan is split east to west by the Hindu Kush Range of the Himalayas, rising in the east to heights of 24,000 feet. Except in the southwest, most of the country is covered by high snow-capped mountains and deep valleys. The few passes are deep and narrow. The Oxus, Kabul and Helmund are the most important rivers, and there are hundreds of swift and unnavigable mountain streams. The northern climate ranges from extremes of below zero to over 100 degrees. The south is not so extreme although snowfall is heavy all over the country in winter.

Both mineral and forest resources are largely unexploited. There are deposits of coal, copper, gold, iron ore, oil and silver. Timber and gum resin are obtained from the forests.

Albania (Republic)

(Shqipëria)

Area: 10,631 square miles.

Population (est. 1939): 1,063,000.

Density per square mile: 100.0.

Head of the Government: Col. Gen. Enver Hoxha.

Principal cities (census 1930): Tiranë (Tirana), 30,806 (capital); Shkodër (Scutari), 29,209 (northern trading center); Korçë (Koritsa), 22,787 (farming center).

Monetary unit: Albanian franc.

Racial stock: Albanian, 99.8%; others, .2%.

Language: Albanian.

Religions (est.): Moslem, 69%; Orthodox Christian, 21%; Roman Catholic, 10%.

Albania, looking out on the Adriatic Sea from an area about the size of Maryland, is a rugged, backward agricultural state. Anciently a part of Illyria and later, of the Roman Empire, it was ruled by the Byzantine Empire from 535 to 1204 A.D. An alliance (1444-1466) of Albanian chiefs failed to halt the advance of the Turks and the country remained under at least nominal Turkish rule for more than four centuries, until it proclaimed its independence on Nov. 28, 1912. Prince William of Wied, the new ruler, was forced to leave the country on Sept. 3, 1914, and through World War I anarchy gripped Albania which was variously occupied by Italian, Greek, French, Serb and Austro-Bulgarian forces. On Aug. 2, 1920, Italy recognized Albanian independence and evacuated the country. Ahmed Zogu, premier in 1922-23, ousted the government of Mgr. Fan Stylian Noli in 1924 and became president of a newly constituted republic in 1925. Three years later, after concluding pacts putting Albania in Italy's sphere of influence, Zogu proclaimed himself King Zog I. In 1939

Benito Mussolini set his Italian army on defenseless Albania and quickly conquered and annexed it. World War II brought German occupation but Albania was free by the end of 1944 and established a leftist provisional government under Colonel General Enver Hoxha. That regime was confirmed in power by subsequent elections, and British, Russian and U. S. recognition. Since then, Albania has collaborated closely with Russia and Yugoslavia. Meanwhile, in mid-1946, the Greeks were demanding the Albanian area of northern Epirus.

Elections of Dec. 2, 1945 for the constituent assembly officially gave 93 percent of the votes to a Democratic Front of various resistance elements including some Communists. On Jan. 11, 1946, the assembly proclaimed Albania a republic with Hoxha as head of government, commander-in-chief of the armed forces and defense minister. He is assisted by a cabinet of Democratic Frontists. For administration, the country is divided into nine prefectures.

The army, unofficially estimated at 50,000 men, in five low-strength divisions, grew out of resistance forces mainly U. S. and British-equipped. In late 1944 and early 1945 several regiments were sent into Bosnia and Montenegro to help fight retreating Germans.

While primary education is nominally compulsory, illiteracy is high, especially among women. In 1939 there were 663 state primary schools with 56,936 pupils, and nineteen secondary schools with 6,235 students. There are no institutions of higher learning. According to whether they live north or south of the Shkumbi River, Albanians are called Ghegs or Tosks, and live in clans or tribes, recalling feudal Europe. Moslems predominate in most areas.

Albania is still a primitive country where each family tries to provide most of its own needs. Nearly the whole population is engaged in combined farming and stockraising. Mountainous areas in north and south are unfit for cultivation, and only a small portion of the central part is fit for plow. Corn is the chief crop—155,755 tons in 1938. Others are wheat, tobacco, oats, barley, rye, spelt, olives and citrus fruit. Only a few factories are engaged in processing Albania's food products.

Albania has had an adverse trade balance since World War I. Imports in 1938 were \$6,719,000 of which 37.2% came from Italy, 11.2% from Yugoslavia, and 6% from the United States. Exports were \$2,925,000 of which 68.4% went to Italy, 14.7% to Greece, and 4.5% to the U. S. The chief imports were cotton and cotton goods (21.6%), corn, benzine, woolen goods and petroleum; the main exports, wool (13.6%),

hides and furs (13.5%), cheese, cattle, eggs and bitumen.

Albania has no railroads, but good highways were developed by the Italians for strategic purposes and the Russians continue such construction. The principal and only fully equipped port is Durrës (Durazzo).

Before World War II revenues were insufficient to meet the costs of government, and the country was financially dependent on Italy. Revenues in 1939 were \$9,140,928; expenditures, \$9,035,328. The national debt in 1938 was \$20,460,000, of which three quarters was external. The chief foreign investments were Italian.

Albania is a mountainous state, largely over 3,000 ft. above sea level, with a narrow marshy coastal plain crossed by several rivers. A complex, often inaccessible mountainous hinterland encloses small fertile basins, and contains some wide valleys, the largest of which is that of Lake Ohrid in the southeast. The interior mountain plateaus and basins contain the centers of population. With the exception of the Bojana in the northwest, which is the outlet of Lake Scutari (135 sq. mi.) to the Adriatic, there are no navigable rivers.

Mineral wealth, thought to be considerable, is relatively unexploited. The principal minerals are aluminum (1938 output: 9,920,700 lbs.) and petroleum (1939 output: 229,278 short tons). There are also lignite, bitumen, asphalt, copper and iron deposits.

Forest resources include large stands of oak, walnut, chestnut and elm and in the high regions, beech, pine and fir. Almost all forests are owned by the communes and the state.

Arabia

The Arabian peninsula, at the southwest extremity of Asia and measuring about four times the size of Texas, was once a single political unit, but today it consists of the kingdoms of Saudi Arabia and Yemen, the British colony of Aden and six British protectorates. The peninsula, with an area of about one million square miles, and extreme length of 1,400 miles, is generally a plateau sloping gently eastward from a mountain range that averages 5,000 feet in elevation and runs along its entire west side within ten or fifteen miles of the Red Sea. The range reaches a maximum of 12,236 feet in Yemen.

Arabia has no rivers and no forests and is principally a desert dotted with many oases. The big powers are interested in Arabia for two reasons—substantial oil deposits exist in several parts of it, and it provides several strategic stations on long airline routes.

Mohammed united all of Arabia in the 7th century and his followers, led by caliphs, founded a great empire with its capital at Medina. Later, the caliphate capital was transferred to Damascus, and then Baghdad, but Arabia retained importance because of the holy cities of Mecca and Medina. In the 16th and 17th centuries, the Turks established at least nominal rule over much of Arabia, and in the middle of the 18th century it was divided into a number of separate principalities.

Through agreements with local rulers, the British extended rule over a good part of the southern and eastern coasts in the 19th century. At the same time, the Wahhabs, a religious sect advocating strict adherence to Mohammed's teachings, placed their rule over most of central and eastern Arabia and their work produced the genesis of the present Saudi Arabia.

Political Divisions of Arabia

Political Division	Area (sq. mi.)	Population (est. 1938)
Aden Colony (British)	80	65,000
*Aden Protectorate	112,000	600,000
*Bahrein Islands (sultanate)	213	89,970†
*Kuwait (sheikhdom)	1,930	50,000
*Oman and Masqat (sultanate)	82,000	500,000
*Qatar (sheikhdom)		
Saudi Arabia (Kingdom)	609,841	5,250,000
Asir	13,857	750,000
Hejaz	182,192	1,500,000
Nejd	413,792	3,000,000
*Trucial Coast (sheikhdom)	**	**
Yemen (Kingdom)	75,000	3,500,000

*British protectorate.

**No reliable data.

†Census 1941.

Saudi Arabia (Kingdom)

This most important state of the peninsula is almost solely the creation of King Ibn-Sa'ud. In 1901 at the age of twenty, he seized the amirate of Riyadh and soon set himself up as the leader of the Arab nationalist movement. On the collapse of Turkey at the end of World War I, he freed the whole peninsula from Turkish rule, and through a series of local military campaigns was able to proclaim himself King of Hejaz and Nejd and dependencies in 1927. His territories became the Kingdom of Saudi Arabia in 1932.

Hejaz and Nejd are under separate administrations. In Nejd, whose capital is Riyadh, Ibn-Sa'ud's rule is absolute. The eldest of his numerous sons, Prince Sa'ud, acts as viceroy in his absence. The constitution of the Hejaz, whose capital is Mecca, provides for a cabinet of ministers

headed by the King's second son, Prince Faisal, who acts as viceroy in his father's absence. There is a consultative legislative assembly in Mecca and various municipal village and tribal councils whose members are named or approved by the King.

The majority of the inhabitants are Bedouin, many of them nomads following their flocks over the desert. There are a few large towns—Mecca, birthplace of the Prophet (80,000), Medina, the tomb of the Prophet (30,000), Jidda, port of Mecca on the Red Sea (40,000), and Riyadh, capital of the Nejd (30,000).

In the Hejaz, Medina produces dates in the oases, and fruit and honey; otherwise, its products are such desert commodities as camels, horses, sheep, hides, charcoal and wool. The most important commercial activity is the annual influx of Moslem pilgrims to Mecca and Medina. The products of Nejd include dates, wheat, barley, hides, wool, fruits, butter, camels and livestock. Oil is produced by an American company, the California-Arabian Standard Oil Company, whose principal field is at Dharan near the Persian Gulf Coast. Estimated production in 1943 was 7,800,000 barrels. The company's expenditures and payroll constitute important invisible exports while the royalties paid to the government have greatly strengthened its financial condition. Imports including coffee, motor vehicles, rice, sugar and tea amounted to \$9,000,000 in 1938. There is a heavy import balance.

There are no railroads and few motorable roads. Camel transportation still holds its own in most of the country. The monetary unit is the riyal at par with the Indian rupee.

Kuwait (Sheikdom)

Kuwait, on the northwestern shore of the Persian Gulf, is an independent state ruled by Sheikh Sir Ahmed al Jabir al-Subah. British protection, first given in 1898, has several times prevented it from being absorbed by Saudi Arabia. The territory surrounding Kuwait, its port, is largely desert; and its economy depends entirely on the sea, and trade which consists of exchanging Arab goods from the interior for textiles, rice, sugar and other necessities. Imports in 1938 totaled \$2,004,322 and exports, \$848,962. Petroleum is also produced.

Oman and Masqat (Sultanate)

Occupying the mountainous southeastern part of the peninsula, Oman is nominally an independent state under the rule of Sir Saiyid Sa'id bin Taimur. It has been under British protection since early in the 19th century. The state is best known for its date cultivation which has reached a high level in the interior. Its riding camels

are considered the best in the world. Exports in 1939 were \$1,108,836 and imports, \$1,622,748. Chief exports are dates, pomegranates and dried fish. Trade is mainly to and from India. The capital, Masqat (population 4,200) which commands the entrance to the Persian Gulf, is inhabited largely by Baluchis and Negroes.

Qatar (Sheikdom)

Qatar occupies the whole of the Qatar peninsula on the Persian Gulf. It is ruled, under British protection, by Sheikh Abdullah ibn Jasmil al Thani. The whole area is claimed by Saudi Arabia. Oil deposits have been located there.

Trucial Coast (Sheikdoms)

The area extending along the Gulf of Oman and Persian Gulf is ruled by 7 semi-independent sheikhs. Treaties signed with Britain in 1853 and 1892 provide that the sheikhs will not enter into agreements with or cede or sell any part of their land to any other power.

Yemen (Kingdom)

The Yemen, an independent country under the rule of the Imam Yahia, occupies the southwestern extremity of the peninsula. Its independent status was confirmed by the Treaty of Sana with Britain and India (February 11, 1934) and the Treaty of Taif concluded with Saudi Arabia at the cessation of hostilities between the two states on May 13, 1934. The people are permanently settled and are for the most part engaged in agriculture, fishing and trade. Chief products are Mocha coffee, sheep and goat skins. Much of the trade goes through the port of Aden. The capital and principal town, Sana (population about 25,000), is located in mountains rising to over 12,000 feet.

Argentina (Republic)

(República Argentina)

Area: 1,079,965 square miles.

Population (est. 1945): 14,130,871.

Density per square mile: 13.08.

President: Brig. Gen. Juan D. Perón.

Principal cities: Buenos Aires, 2,485,355 (capital and chief port); Rosario, 521,210 (flour milling); Avellaneda, 399,021 (industrial suburb of Buenos Aires); Córdoba, 339,021 (north west farming center); La Plata, 256,378 (sea-port; meat packing); Tucumán, 169,566 (sugar cane).

Monetary unit: Peso.

Racial stock (est. 1939): White, 88%; Mestizo, 10%; Indian, 2%.

Languages: Spanish (official), Italian.

Religion: Roman Catholic.

When Argentina achieved unification in 1853, it patterned its government on the U. S. Constitution but today Argentina is regarded as a problem child of the Americas.

Discovered in 1516 by the Spaniard Juan Díaz de Solís, Argentina developed slowly under Spanish colonial rule. Its now great cattle industry was first important as a source of supply for the Peruvian mining centers. Buenos Aires, now the third largest city of the Americas, was founded and then abandoned in 1536, and not re-founded until 1580. Its inhabitants repulsed invading British forces in 1807 and when Napoleon captured the King of Spain, the Argentinians set up their own government in the king's name in 1810. On July 9, 1816, independence was formally declared. Internal dissension, particularly between Buenos Aires and the provinces, was put down under the dictator Juan Manuel de Rosas who brought about unification in the years from 1829 to 1852. Juste José de Urquiza, whose forces had ousted de Rosas, was the first president under the 1853 constitution.

Argentina made great material progress under Presidents Domingo Faustino Sarmiento, 1868-74; Nicolas Avellaneda, 1874-80; and particularly under Julio A. Roca, 1880-86. During Roca's second term, 1898-1904, two border disputes with Chile were settled, one by the U. S. minister in Buenos Aires, the other by King Edward VII of England. Introduction of the secret ballot in 1910 by President Roque Saenz Pena was followed by the 1916 defeat of his Conservatives after thirty years of power.

President Hipolito Irigoyen, 1916-22, refused to abandon Argentinian neutrality in World War I. Re-elected in 1928, Irigoyen, a Radical, was ousted by a Conservative revolution led by General José Felix Uriburu. His successor, General Agustin Justo, 1932-38, followed a moderate policy, while under the leadership of a former Radical, Roberto M. Ortiz, Argentina again proclaimed neutrality but in general co-operated in hemisphere defense problems.

Illness of Ortiz passed the presidency in June, 1940, to a Conservative, Ramon Castillo, whose regime was toppled in June of 1943 by a revolt led by General Pedro P. Ramirez. He immediately abolished all political parties and broke relations with the Axis on Jan. 26, 1944, after disclosures of German spy activity in Argentina. A clique of army officers, apparently fearing that this would lead to war with Germany, replaced Ramirez on Feb. 24, 1944, with General Edelmiro Farrell.

In Farrell's regime, which was embarrassed by diplomatic non-recognition, Colonel Juan D. Perón soon emerged as the strong man. Striving to win recognition,

the government made an eleventh-hour declaration of war against the Axis on March 27, 1945, and signed the Act of Chapultepec on April 4, 1945. Recognition by the United States came five days later. The elections of Feb. 24, 1946, gave overwhelming victory to Perón whose inauguration as president on June 4, 1946, was followed in two days by establishment of diplomatic relations with Russia which, up to that time, had loudly denounced the Argentine regime as Fascist and pro-Nazi. **GOVERNMENT.** A federal union of fourteen provinces and nine territories, Argentina normally elects every six years a president and vice-president, chosen by electors who are elected by direct male suffrage. The president is assisted by a cabinet of ministers appointed by him. The vice-president presides over the Senate but has no other powers. Neither are eligible for immediate re-election. The national congress has two houses—the thirty-member Senate elected by the provincial legislatures for nine-year terms, and the 158-member Chamber of Deputies popularly elected for four years.

PROVINCIAL. While each province has its own constitution, elected governor, legislature and judiciary, the president may intervene in crisis and take over the local government. The Federal District (City of Buenos Aires) has a locally-elected municipal council but the mayor is named by the president, as are the territorial officials.

JUDICIARY. The president, with Senate approval, appoints for life-terms the judges of the federal supreme court, five courts of appeal, and district courts (at least one in each province). The federal courts handle cases of national character, and those in which different provinces, or residents of different provinces, are concerned.

DEFENSE. Military training is compulsory at twenty for one year, after which the men pass to the reserves until their forty-fifth year. Army strength in 1940 was 49,705 with 282,503 reserves. Much of Argentina's military equipment is obsolete. Because of its attitude during most of World War II, it was never given any U. S. military lend-lease goods and was the only Latin American nation so deprived. The air force in 1940 counted 2,023 men and 200 planes. The navy on Jan. 1, 1946 had about 15,000 men, two old but modernized battleships, three modern light cruisers, eleven modern destroyers, three modern submarines, four old coast defense ships and fourteen minesweepers.

EDUCATION. Argentina's estimated illiteracy rate of 15 percent is the lowest in all Latin America. Education is free, secular and compulsory between six and fourteen. Enrollment in 1943 was put at 1,928,343 in 13,968 primary schools, 135,456 in 718 intermediate schools, and 37,586 in six uni-

versities, of which the most important is that of Buenos Aires.

PUBLISHING. Argentina is the center of publishing and printing for the Spanish-speaking countries of the western hemisphere. In 1935 there were 844 dailies, periodicals and reviews. The Buenos Aires daily, *La Prensa*, is considered one of the world's greatest newspapers, followed closely by *La Nacion*.

RELIGION. The predominant religion is Roman Catholicism which is supported by the State. There are two cardinals; one, Antonio Cardinal Gaggiano, was invested at the last papal consistory.

RACIAL STOCK. There is less admixture of non-white blood in Argentina than in any other American nation except Canada and possibly Uruguay. The basic racial stock, Spanish Creole, was tempered by a great influx of European immigrants which began about 1850 and reached its peak in 1910. Immigration from 1857 to 1937 totaled 3,435,477, of whom 43.5% were Italian, 27% Spanish, 4% French, 2.5% German and 2% Russian. The native Indians, living mostly in the northern territories, are dying out; there are almost no Negroes. The birth rate (1936-38 annual average: 24.2; 1943: about 23.0) is low for Latin America as is the death rate (1936-38 annual average: 11.9; 1943: about 9.9).

AGRICULTURE. A farming and stock-raising nation, Argentina devotes 44 percent of its total area to pasture and 11 percent to cultivation. More than 60 percent of cultivated land is planted in cereals—wheat, corn, linseed and oats. About 20 percent is in alfalfa for stock feed. Cotton, sugar cane and fruits are important and Argentina is the world's largest producer of yerba mate (Paraguay tea), the national beverage. The 1945 wine production of 191,000,000 gallons was about 20 percent below normal.

MAJOR AGRICULTURAL CROPS BY ACREAGE AND VOLUME, 1943

Crop	Acres	Tons
Wheat	16,563,442	7,054,720
Corn	10,127,000	2,138,462
Linseed	6,213,285	1,681,008
Potatoes	479,180	1,137,290
Oats	3,616,964	639,334
Barley	1,887,080	385,805
Sunflower Seeds	1,664,780	380,294
Rye	2,484,573	163,345

There were in 1942 a total of 50,902,000 sheep, 6,767,000 horses, 2,838,000 goats, 509,000 mules and asses, and in 1945, 34,010,000 cattle and 8,010,000 hogs. Cattle raising predominates on the pampas, especially in Buenos Aires province. Sheep raising is more important in Patagonia. Livestock slaughtered in 1943 included cattle, 6,697,921; sheep, 11,900,370; and

hogs, 3,500,292. The 1945 wool clip was estimated at 518,000,000 lbs. Cattle hide and kips exports in 1944 were 5,119,000 (50% to Britain) and (Jan.-Nov. 1945), 3,972,000 (70% to Britain). Gross value of agricultural production in 1943 was 1,600 million pesos, of livestock production 1,750 million pesos.

MANUFACTURING. Industrial expansion was accelerated during World War II by the shortage of imports, but industry is still closely allied to agriculture. The principal industry is meat refrigeration, followed by flour milling, textiles, sugar refining, dairy products, quebracho extraction, and wine. There were in 1941, 57,940 industrial establishments with 852,154 workers and products valued at 6,337 million pesos (7,800 million in 1943). Most of the meat packing plants are controlled by U. S. and British interests.

TRADE. Foreign trade during World War II was notable for low-volume imports and low-quantity but high-value exports.

Value of trade for three years in paper pesos:

Year	Imports	Exports
1943	942,048,436	2,192,264,055
1944	1,007,154,000	2,352,881,000
1945	693,800,000*	1,737,200,000†

*January-August.

†January-September.

Meat exports constituted about one third of all 1944 exports in value, followed by wheat, hides and skins, wool, and forest products. Exports went principally to Britain (37%), United States (22%), Brazil (9%), Spain, South Africa, Peru and Switzerland. Sources of imports were Brazil (34%), United States (15%), United Kingdom (8%), Sweden, India, Chile, Switzerland and Spain. The leading imports were textiles, chemical products, fuels and lubricants, foodstuffs, and machinery.

COMMUNICATIONS. Arrivals of sea-going vessels in 1944 totaled 1,485 with a tonnage of 3,324,407. The merchant fleet in 1943 consisted of 4,079 ships of 455,807 tons, about 35% of which was government-owned. The chief ports are: Buenos Aires, second only to New York in the western hemisphere, and La Plata, both on the Plata estuary; and Rosario, a port on the Paraná River.

Railway mileage in 1945 was 28,775, nearly all of which radiates outward from Buenos Aires. A large percentage of the railroads are British-owned, but the government which already owns one third of the mileage is pursuing a policy of eventual nationalization. Highway mileage in 1945 was estimated at 253,115 miles, largely unimproved. Telephones in 1945 totaled 493,055; broadcasting stations 55; and wireless sets 1,250,000. Five principal air-

lines are in operation and extend as far south as Tierra del Fuego. Direct international connections exist with neighboring countries.

FINANCE. The ordinary budget in 1945 balanced at 1,413,355,000 pesos. The national internal debt (June 30, 1945) was 8,941,000,000 pesos (1944: 7,673,000,000 pesos), while the external debt was 11,100,000 pesos in pounds, 144,300,000 pesos in dollars, and 83,400,000 pesos in Swiss francs. British investments in 1944 were \$371,998,509, with about 75% in railways. U. S. investments in government obligations in 1943 were \$310,596,310, while direct investments in industry in 1940 were \$387,945,000.

TOPOGRAPHY. Second in South America to Brazil in size and population, Argentina is about 2,070 miles long and 860 miles wide at the maximum. In general, the country is a plain, rising westward from the Atlantic to the Chilean border and the towering Andes peaks, including Aconcagua, 23,080 feet high, the highest peak in the world outside of Asia. In all, twenty of South America's thirty-two tallest mountains, all over 20,000 feet, are wholly or partly in Argentina. The northern area of the Argentine plain is the swampy and partly wooded Gran Chaco. South of that to the Rio Negro is the rolling, fertile Pampas, rich for agriculture and grazing, and supporting most of Argentina's population. Next southward is Patagonia—a region of cool, arid steppes with some wooded and fertile sections. The eastern part of Tierra del Fuego, the island southern tip of South America, belongs to Argentina.

CLIMATE. Except for the northern Gran Chaco which has mild winters and torrid summers, Argentina lies in the south temperate zone. The Pampas has an average temperature of 60 degrees and freezing is rare. Temperature extremes increase progressively southward. All over Argentina, January is the warmest month and June and July, the coolest months. The heaviest rainfall, over sixty inches a year, hits the Gran Chaco, while on the Pampas it ranges from twenty in the west to forty inches in the northeast.

RIVERS. The three great rivers forming the Plata system—the Paraná, Paraguay and Uruguay—are extremely important commercial arteries in northern Argentina. Rosario and Santa Fé, 260 and 360 miles respectively, above Buenos Aires on the Paraná, are accessible to ocean vessels. Many other river ports lie along the total navigable length of 1,997 miles of the three streams.

MINERALS. Argentina must import most of nearly every mineral it uses. Some oil is produced in Patagonia, and there is small mining of tungsten, lead, gold, zinc,

tin, silver and beryllium. All mineral production in 1942 was valued at 214,300,730 pesos, of which oil accounted for more than 60 percent.

FORESTS, FISHERIES. Forests cover 123,-550,000 acres, 17.9 percent of Argentina, largely in the north central part where the Gran Chaco area is the world's chief source of quebracho extract. Total production of this tanning agent obtained from quebracho logs was, in 1943, 162,722 tons, of which 144,504 tons were exported. Other forest products—hardwoods, dyewoods, lignum-vitae, red quebracho, medicinal gums and other tannins—are consumed locally for the most part. Argentina's coastal waters abound in fish, but the sea food industry is so little organized that tons of fish are imported from Uruguay, Chile and Brazil.

Austria (Republic)

(Österreich)

Area: 34,062 square miles.

Population (census 1939): 6,694,782.

Density per square mile: 196.6.

Allied Council: General Mark W. Clark (U. S. A.); Marshal of the Soviet Union Ivan S. Konev (U. S. S. R.); Lt. Gen. Sir Richard McCreery (United Kingdom); Lt. Gen. Emile-Marie Bethouart (France).

Principal cities (census 1939): Vienna, 1,920,-390 (capital, industrial center); Graz, 207,867 (industrial center); Linz, 128,006 (Danube port); Innsbruck, 78,523 (Tyrolean tourist center).

Monetary unit: Schilling.

Racial stock: Austrian.

Language: German.

Religions (est.): Roman Catholic, 93.68%; Protestant, 3.11%; Jewish, 2.93%.

HISTORY. The history of Austria before 1918 is largely that of the Austro-Hungarian Empire and the Hapsburg dynasty. Its origin was in the province of Ostmark, separated from Bavaria and given to Leopold of Babenberg (976 A. D.) by the Holy Roman Emperor, Otto II. It was under the Babenbergs until 1246 when it passed to Ottokar of Bohemia who lost it to Rudolf of Hapsburg (1278). The Hapsburgs gradually added, through marriage and treaty, the Netherlands (1477), Bohemia, and Hungary (1526). A large part of Italy was won (1714), but Silesia was lost to Prussia during the rule of Maria Theresa (1740-80). Emperor Francis I laid down the Holy Roman crown in 1806 at the height of the Napoleonic Wars, in which Austria with her allies was finally victorious. Supremacy in Germany was lost through defeat by Prussia in the Seven Weeks War (1866). In 1867 the Dual Monarchy of Austria and Hungary was established, united in the person of the sovereign, Franz Josef I (1848-1916).

Following the defeat of the Austro-Hungarian armies and the World War I armistice, the republic of Austria was established out of the German-speaking Austrian crownlands but was confined to its present borders by the Treaties of St. Germain (1919) and Trianon (1922). The years immediately following the war were a period of privation, dissension and riots with Austrian currency becoming worthless and the nation, bankrupt. In 1922 the League of Nations excused Austria from further war reparations payments for 20 years. This afforded some relief and a more stable government was set up, although interparty political tension and financial crises continued. Establishment of a fascist form of government by Engelbert Dollfuss, who became Chancellor (1932), was followed by an unsuccessful Socialist revolt (February 1934) and an attempted Nazi coup d'etat, which failed although Dollfuss was killed. He was succeeded by another Clerical, Kurt von Schuschnigg, whose efforts to maintain Austria's independence ended (March 12, 1938) with the bloodless occupation of Austria by German troops. Hitler proclaimed the *Anschluss* of Germany and Austria the next day and Austria, now known as Ostmark, lost its political identity.

Following the liberation of Vienna by the Red Army (April 13, 1945) a coalition (Socialist, Communist, Catholic Parties) government was established under the chancellorship of Dr. Karl Renner, a veteran Socialist. Elections held November 25, 1945 resulted in victory for the People's Party whose leader, Leopold Figl, became chancellor. Dr. Renner was elected president of the Second Austrian republic (December 20, 1945).

ALLIED MILITARY GOVERNMENT. Austria was occupied (1945) by the Soviet Union, the U. S., Britain, and France. An Allied Council was set up to establish the independent government pledged by the U. S., U. S. S. R. and Britain at Moscow in November 1943. The country within its 1937 frontiers was divided into four national zones as was the city of Vienna. The Allied Council and the inter-Allied governing authority of Vienna consisted of the ranking officers of the four participating nations. By an agreement signed by the four powers June 28, 1946, the Council's functions became supervisory rather than administrative, and the Austrian government was given power to promulgate legislation and conclude foreign pacts (other than with the 4 powers), subject only to the unanimous disapproval of the Council.

NATIONAL GOVERNMENT. Austria is a federal republic comprised of nine provinces, each of which has its own elected assembly for the control of regional affairs. The federal parliament consists of two

houses—the *Bundesrat* whose members are nominated by the provincial assemblies and the *Nationalrat* whose 165 members are chosen by national elections. The party standing in the November 25, 1945 elections was as follows: Catholic People's party 84, Socialist 76, Communist 5. The head of state is the president of the republic, elected by parliament in joint session for a six-year term. The government is administered by the chancellor and his cabinet.

Austria has no military or naval forces. The Austrian army was absorbed into the German Wehrmacht at the *Anschluss* and lost its national identity. Allied occupational troops (June, 1946) numbered 245,000 (140,000 Soviet, 37,000 French, 24,000 U. S., 24,000 British), but their numbers were to be gradually reduced.

SOCIAL AND ECONOMIC CONDITIONS.

[Note: Definitive postwar statistics are for the most part unavailable. Pre-*Anschluss* (1937) statistics are the latest available.]

Agriculture employs over one-third of the population but the country is heavily dependent on imported foodstuffs. About 89.5 percent of the total area is classified as productive; of this area 40.9 percent is intensively cultivated as plowland, meadowland gardens and vineyards. The amount under plow is relatively small, and mixed farming predominates. Rye is the leading cereal, followed by oats, wheat, barley and maize. Other crops include hops, grape, flax, fruits and tobacco. The vine, absent only in Salzburg, Tyrol and Upper Austria, reaches its finest quality in the sheltered Rhine Valley and the warm eastern valleys. Average annual wine production (1931-42) was 23,500,000 gallons.

MAJOR AGRICULTURAL CROPS, 1937

Crop	Metric tons
Potatoes	3,612,000
Sugar beets	1,008,000
Rye	476,000
Wheat	400,000
Barley	288,000
Oats	287,000

Stock raising and dairy farming both in the Alpine pastures and the lowlands of the east were of increasing importance prior to World War II. In 1934 Austria had 2,348,600 cattle, 2,823,000 pigs, 263,400 sheep and 261,400 horses. Austrian crop production in 1945 was estimated to be sufficient to meet only 50 percent of her needs.

Austria is primarily an industrial country but facilities have suffered from war damage and from reparation removals from former German-owned plants. Most important are the metallurgical and engineering industries. Styria is responsible for almost all the iron and steel production

(1937: pig iron—389,000 metric tons; steel 650,000 metric tons). The working of timber and its derived products: pulp, cellulose, furniture and musical instruments is second in importance. The textile industry is the basis for a number of finishing trades. Other industries include leather, chemicals and glass manufacture as well as the production of food and drink, which is largely dependent upon imported materials.

Exports (1937) amounted to \$136,000,000 and imports \$162,000,000. The constantly unfavorable prewar balance was offset in part by international loans and in part by invisible exports such as tourist expenditures, income from foreign investments and the large transit trade.

The largest single export was timber and the leading import, live animals and articles of food and drink.

The construction of railways and roads has been hampered by physical difficulties. There are more than 4,000 miles of railway line, partly electrified. Water traffic is restricted for the most part to the Danube River. The major river ports are Linz and, especially, Vienna which is also an important rail, road and air center.

NATURAL FEATURES AND RESOURCES. The republic of Austria covers an area about equal to that of Scotland and includes much of the mountainous territory of the eastern Alps (about 92.3 percent of the country is classified as mountainous). From the Rhine Valley, Austria's western frontier, these ranges cross the country from west to east, merging on the north and northeast into the Danube Valley and the open Vienna basin. On the east and southeast, the ranges merge into the forested foothills overlooking the undulating countryland of western Hungary. The country contains much beautiful scenery, including many snowfields, glaciers and snow-capped peaks. The principal river, the Danube, enters Austria in the northwest and crosses the northern part of the country. There are many beautiful lakes including the Achensee of the Tyrol which lies at a height of 3,000 feet.

Variety is the keynote of the climate and climatic conditions vary considerably within small distances according to the nature of local topography.

Austria possesses valuable mineral resources. In the Eisenerz—Vordernberg Range (Styria) lies one of the largest European deposits of iron ore. Copper is mined in Salzburg, Tyrol and Lower Austria, and lead and zinc at Bleiberg (Carinthia). Other minerals include bauxite, graphite, sulfur and manganese. Fuel resources comprise small coal deposits in lower Austria and large quantities of lignite, found everywhere except in Salzburg. Heavy supplies of coal and coke must be imported,

but extensive water power resources are available for exploitation. With a production of 1,210,000 metric tons of petroleum in 1944, Austria became Europe's third largest producer. Fields are located in the Zistersdorf and Muehlberg areas, both in the Soviet zone.

MAJOR MINERALS, 1937

Mineral	Metric tons
Lignite	3,242,000
Iron ore	1,880,000
Coal	230,000
Lead	8,700

Austrian forests cover 38 percent of the total area and are an important national asset. Prior to World War II, more than 100,000 were directly employed in forestry or sawmills. Over 70 percent of the forest is coniferous in which pine predominates. The annual prewar timber output approached 10,000,000 cubic miles of which about 60 percent was available for export or as the basis of the wood and paper industries.

Belgium (Kingdom)

(Royaume de Belgique—
Koninkrijk België)

Area: 11,775 square miles.

Population (est. 1939): 8,396,276.

Density per square mile: 713.1.

Sovereign: King Leopold III.

Regent: Prince Charles, brother of the King.

Prime Minister: Camille Huysmans.

Principal cities (est. 1939): Antwerp (Anvers), 271,386 (port and commercial center); Bruxelles (Brussels), 189,036 (capital); Gand (Ghent), 162,011 (textiles); Liège, 16,187 (iron and steel).

Monetary unit: Belgian franc.

Racial stock: Walloon; Flemish.

Languages: French, Flemish.

Religion: Predominantly Roman Catholic.

In 1914 and again in 1940, Belgium was crushed by German armies because its position in the Low Country area made it a highway on the invasion route to France. Highly industrialized, a bit larger than Maryland, Belgium emerged from World War II in fair economic condition but, politically, the country suffered crisis after crisis in the struggle between conservatives and elements of the left. Bound up in this was the conflict between those who supported King Leopold III and those who argued that the monarch had been at least afraid of the Nazis and perhaps even a collaborator during the German occupation.

CONQUERED BY CAESAR. Perhaps the first mention of the Belgians in history

came in 57 B. C. when they were conquered by Julius Caesar. In the Middle Ages the Belgian towns became wealthy and virtually autonomous as great textile centers. Belgium became part of Burgundy in 1385; and later, part of the Spanish domains under Charles V. By the Treaty of Utrecht, in 1713, Belgium went to Austria, though retaining autonomy, and from 1792 to 1815 it held the same status under France. Shoved into the Kingdom of the United Netherlands by the Congress of Vienna in 1815, the Belgians revolted and proclaimed independence on Oct. 4, 1830, choosing as their sovereign Prince Leopold of Saxe-Coburg. He became King Leopold I, 1831 to 1865.

Recognized as independent and with a guaranteed neutrality by the Treaty of London in 1839, Belgium progressed peaceably in the 19th Century under Leopold I, and his son, Leopold II, who reigned from 1865 to 1909, and was succeeded by his nephew, Albert I—1909-34.

Despite heroic Belgian Army resistance under the personal leadership of Albert, the country was overrun by the Germans in 1914 and occupied throughout World War I. The peace settlement in 1919 gave Belgium the regions of Moresnet, Eupen and Malmedy, and a mandate over Ruanda-Urundi in Africa. Between the wars the country devoted itself to reconstruction and the quest for financial stability.

LEOPOLD III. King Leopold III, who succeeded his father in 1934, ordered the Belgians to surrender to the Nazis and was taken prisoner, himself, on May 28, 1940—eighteen days after the German attack on the Low Countries. From the point of view of Belgium alone, his action was regarded as perhaps sensible, but the abrupt demise of Belgian resistance hurt Allied strategy and contributed to the entrapment of the British at Dunkirk. The Pierlot cabinet escaped from the country and set up a government-in-exile in London. When that government returned to Belgium on Sept. 7, 1944, King Leopold's brother, Prince Charles, was elected Regent and the the Catholic premier, Hubert Pierlot, became head of a coalition government. He was succeeded in February, 1945 by Achille van Acker, a Socialist, whose principal problem aside from reconstruction was the status of Leopold.

A Liberal-Socialist-Communist coalition opposed the return of Leopold from Switzerland, where he had gone to await the determination of his future. Among the accusations against him were that he let the Allies down by quick surrender in 1940, that he had refused to leave the country to lead a government-in-exile, that he had willingly accepted the protection and comfort of the Nazis during occupation.

The Christian Socialists (Catholics) won a plurality in the elections of Feb. 17, 1946, but their pro-Leopold stand blocked formation of a cabinet. Paul-Henri Spaak made two unsuccessful attempts to set up a cabinet, after which van Acker finally formed a government on March 31 without Catholic participation. On July 9, van Acker lost on a vote of confidence and had to resign. Camille Huysmans, the seventy-five-year-old Mayor of Antwerp, managed on Aug. 2 to form a new cabinet but it was regarded as merely a stop-gap until the October communal elections.

King Leopold III was born in 1901, son of King Albert I and Princess Elizabeth of Bavarie, and married Princess Astrid of Sweden in 1926. They had three children: Josephine Charlotte, born in 1927; Prince Baudouin, 1930; and Prince Albert, 1934. Astrid was killed in 1935 in a motor crash in Switzerland and a year after, King Albert I was killed in a mountain-climbing fall near Namur. On Sept. 11, 1941, while he was a German prisoner, Leopold married a commoner, Marie Lillian Baelis, daughter of a former cabinet member. She renounced the title of queen upon marriage, and became Princess de Rethy. Leopold's brother, and regent, is Prince Charles, Count of Flanders, who was born in 1903. His sister is Marie-Jose, born in 1906, wife of former King Umberto II of Italy.

GOVERNMENT. Under the 1831 constitution, Belgium is a constitutional, hereditary monarchy. The king's authority is delegated to the ministers whom he appoints and dismisses to conform with the parliamentary majority. The ministers who constitute the cabinet must have the confidence of the parliament, consisting of a 202-member chamber of deputies popularly elected, and a senate of varying strength (167 in 1946) elected both directly and indirectly. All members serve for four years unless one or both houses are dissolved by the king, in which case new elections must be held in forty days. Belgium's nine provinces and 2,670 communes have crown-appointed officials but retain considerable autonomy with locally-elected councils.

Judges are appointed for life. The highest appellate court is the Cour de Cassation at Brussels; there are three regional courts of appeal.

DEFENSE. Military service in 1939 was compulsory; the initial training period was 1 year. The partially mobilized Belgian army in 1939 had 600,000 men and 242,000 reserves; and the air force, 7,500 men and 350 planes. Belgian units fought with the British army, Royal Navy, and RAF during World War II. The armed forces are under the minister of national defense in peacetime; the king takes personal command in wartime. The navy, abolished in 1928, is

now being reformed, with a contemplated force of 2 or 3 frigates, 8 minesweepers, and 12 fast launches.

EDUCATION. Education, free and universal for children from six to fourteen, is under state control in three divisions: primary, intermediate and higher. Primary schools in 1938 numbered 8,712 with 955,038 students; intermediate schools, 273 with 86,279 students; universities 4 (official, Gand [Ghent] and Liège; unofficial, Bruxelles [Brussels] and Louvain) with 10,776 students. There are also numerous private (unofficial) schools, largely under religious auspices.

RACIAL STOCK AND POPULATION. Flemish, a Germanic tongue, is spoken in the provinces of west and east Flanders, Antwerp, Limbourg, and the northern half of Brabant, while French and its Walloon *patois* are spoken in the southern half of the country. Both languages are now official. The Belgian people are similarly divided racially, and the problem of Flemish nationalism has always been an important one. Foreigners in 1938 were estimated at 339,799, mostly Dutch, French, Polish and Italian.

AGRICULTURE. Of Belgium's approximately 7,550,000 acres, about three-fifths was under cultivation in 1938, with 32 percent of the cultivated area devoted to cereals, 50 percent to forage, and 13 percent to root crops. Principal crops in 1939 in tons, were potatoes, 3,663,163; sugar beets, 1,840,069; grass (for hay), 962,859; oats, 798,286; rye, 385,144; wheat, 384,703; chicory, 194,115; and barley, 56,327. Beet sugar production was 194,115 tons. Other crops were fodder beets, root crops, flax and garden fruits. The pastoral industry, especially dairy farming, also flourishes; the livestock census in 1941 showed 1,817,965 cattle, 4,408,367 poultry, and 629,336 swine. Butter production in 1939 was 67,240 short tons. Crop conditions in 1945 were less favorable than for the past several years. Total crop production was 15 percent to 20 percent below prewar levels, and livestock production was only 50 percent of prewar figures.

MANUFACTURING. Belgium is one of the most highly industrialized nations in Europe, largely because of vast, readily accessible coal reserves. Industry has not advanced at the expense of agriculture. The Belgian economy is based on both. According to the last industrial census, in 1930, there were 220,871 industrial establishments with 1,938,000 workers (almost 25 percent of the population), lead by the metal industry, 21,817 plants and 356,246 workers; the textile industry, 10,775 plants and 256,705 workers; and the building and construction industry, 37,218 establishments and 209,988 workers. Production of pig iron and ferroalloys in 1939 was 3,371,936 tons and of steel, 3,421,539 short tons.

Associated with iron and steel in a considerable engineering industry, shipbuilding in Antwerp, and machinery and railway stock in Bruxelles. The centuries-old textile industry produces linen (Courtrai); cotton (in the southeast); and artificial silk (1939 output: 6,504 tons). Antwerp, handling the output of mines in the Congo and Angola, rivals Amsterdam in diamond cutting. Other industrial pursuits are matches, glassware, brewing (1,274 breweries in 1936), sugar beet refining, and food processing.

TRADE. Exports in 1939, including Luxembourg, totaled \$3,636,616,000; imports, \$3,318,159,000. The major exports, by percentage, were: textiles 11.1, chemical and pharmaceutical products 7.2, machinery 5.3, precious stones 4.9, wrought iron 4.7, wool 4.2, copper (crude) 4 and coal 3.8; the major customers (1938), also by percentage, were: France 15.5, Britain 13.7, Germany 12.2, Netherlands 12 and the United States 6.6. The major imports (1939) by percentage, were: machinery 5.3, wheat 5, precious stones 4.6, chemical and pharmaceutical products 4.6, copper 4.5 and wool 4; the major suppliers (1938) also by percentage, were: France 14.4, Germany 11.2, United States 11, Netherlands 9, and the Belgian Congo 8.13. There is a considerable transit trade to central Europe, passing chiefly through Antwerp.

COMMUNICATIONS. Inland transportation facilities are highly developed. Railways in 1938 with a mileage of 7,068 carried 95,555,065 tons of cargo. Navigable waterways, totaling 998 mi. including the well-developed canal system, carried 37,478,200 tons, while the Antwerp River, including the Antwerp Canal, carried 9,922,145 tons. Before the war Belgium had the second largest river fleet on the Rhine. In 1938 almost 25,000,000 tons of shipping entered the chief port, Antwerp. Highway mileage in 1938 totaled 6,560, mostly improved. The Belgian merchant fleet in 1939 totaled 200 ships of 408,418 tons; wartime losses totaled 313,000 tons in compensation for which Belgium received 8 ships of 11,195 tons from 689,286 tons of German shipping divided among the Allies. There were 1,120,402 radio sets, 17 broadcasting stations, and 430,000 telephones in 1939.

FINANCE. Revenues in 1939 were \$1,976,655,340; expenditures, \$2,223,671,956. The public debt on Mar. 31, 1945 was 196,382,000,000 francs. Gold reserves in 1944 were \$732,350,400. U. S. investments in 1939 were \$220,000,000. Under lend-lease Belgium was the only country in Europe to give far more than it received; \$165,000,000 of goods and services were supplied to the U. S. against \$82,884,000 received.

NATURAL FEATURES AND RESOURCES. The northern third of Belgium is a plain extending eastward from the coast of the



North Sea. Between that and the Sambre-Meuse Rivers is a low plateau, varying from 240 to 600 feet in height, and to the south lies the Ardennes plateau, rising to a maximum of 2,000 feet. The shallowness of the North Sea off Belgium precludes good harbors; and some of the port advantages of Antwerp on the Scheldt River, are offset by the fact that approaches to it are through Dutch territory. The Meuse and the Sambre which join at Namur, and the Scheldt, all rise in France.

Belgium's temperate climate is varied by terrain and proximity to the sea. Ostend, on the sea, has an average temperature of 49 degrees and annual rainfall of 27.5 inches, about like Chicago. Baraque Michel, in the Ardennes heights, has average temperature of 43 degrees and rainfall of 59.5 inches, and considerable snow in the winter.

The principal mineral is coal—1939 production, 32,900,348 tons. The Ardennes coalfield, now approaching exhaustion, extends southward into France. The Campine field, comparatively new, lies in the northeast. Iron ore, lead and zinc also are mined, principally in the Ardennes. Belgian mining, highly developed, employs almost 200,000 people.

Forests cover about 20 percent of Belgium but their products are relatively unimportant. Fishing is vital in the national economy. The 1938 catch totaled 43,139 tons valued at \$21,012,588. Sole, shellfish and cod were the leaders.

BELGIAN COLONIAL EMPIRE

Country	Area (sq. mi.)	Population
Belgian Congo	902,274	10,538,000*
Ruanda-Urundi	21,200	3,833,865†

*1942. †1943.

BELGIAN CONGO (CONGO BELGE).

Status: Colony. *Capital:* Leopoldville (population 1938: 35,946). *Governor general:* Pierre Ryckmans. *Foreign trade* (1943): exports, 4,609,725,000 francs; imports, 2,289,475,000 francs. *Agricultural products:* cotton (1943: 47,399 tons); coffee (1942: 36,376 tons); sugar (1943: 15,983 tons). *Minerals:* coal (1943: 23,700,000 metric tons); copper (1944: 163,300 metric tons); diamonds, mainly industrial (1944: 7,540,000 carats); gold (1943: 453,000 fine oz.); manganese ore (1943: 17,400 metric tons); silver (1943: 3,250,000 fine oz.); tin (1944: 5,400 metric tons); zinc (1943: 40,870 metric tons). *Forest products* (1943, in short tons): palm oil, 110,230; palm kernels, 98,105; rubber, 13,228; gum-copal, 17,337. *Communications* (1943): Railroads, 4,053 mi., roads 55,307 mi., navigable waterways 7,320 mi., internal air lines, about 5,500 mi.

The mineral-rich Belgian Congo, in central Africa, with a narrow outlet to the

Atlantic through Portuguese Angola, was acquired Nov. 15, 1908 by the Belgian state from the Belgian king, Leopold II. The latter had backed exploration of the area by the English explorer, Stanley, and in 1885 had been recognized by the great powers as personal sovereign and proprietor of the Congo Free State, as it was then called. The area is now administered by a governor-general appointed by the king and responsible to the cabinet minister for the colonies. The governor-general has unrestricted executive and legislative powers and the colony has no representative institutions of its own. During World War II it furnished many vital war materials to the United Nations. The European population in 1942 was 30,000.

RUANDA-URUNDI. *Status:* Mandate united administratively with the Belgian Congo. *Capital:* Usumbura. *Governor general:* Pierre Ryckmans. *Foreign trade* (1943): exports, 228,728,000 francs; imports, 136,776,000 francs. *Principal products:* tin, coffee, gold, cotton, hides and pelts.

The area, lying in east Africa, was assigned to Belgium as a mandate by the League of Nations at the end of World War I, before which it was a portion of German East Africa. It is administered under the direction of the governor-general of the Belgian Congo by a vice governor-general. The mandate is largely mountainous with livestock grazing the principal pursuit of the natives. There were in 1943 2,167 Europeans and 1,597 Asiatics.

Bolivia (Republic)

(República Boliviana)

Area: 416,040 square miles.

Population (est. 1944): 3,533,900.

Density per square mile: 8.6.

President: Tomas Bonje Gutierrez.

Principal cities (est. 1944): La Paz, 310,000 (de facto capital); Cochabamba, 60,000 (commercial center); Oruro, 50,000 (tin mines); Potosí, 40,000 (mining); Sucre, 30,000 (legal capital).

Monetary unit: Boliviano.

Racial stock (estimate 1940): Indian, 52.34%; Mixed, 27.5%; White, 13.08%; Negro, 0.22%; Unspecified, 6.85%.

Language: Spanish.

Religion: Roman Catholic.

Three and four hundred years ago, Bolivia's rich mines were the main source of Spain's mineral wealth in South America. In World War II in modern times, Bolivian tin sent to the United States and Britain helped save the day for the United Nations after the Japanese overran the normal tin sources of Malaya and the Dutch East Indies. The fifth largest nation of South America, and one of the only two that is

landlocked, Bolivia presents a political history that is outstandingly stormy even in a continent of traditional preference for bullet over ballot. Since 1825 it has had more than sixty revolutions, seventy presidents and eleven constitutions.

Part of the ancient Incan empire, Bolivia was conquered in 1533 by Gonzalo Pizarro, younger brother of Francisco Pizarro, nemesis of the Incans. Bolivia was called Upper Peru until 1825 when independence was won after the defeat of Spanish forces at Potosi by liberating Colombians under General Antonio José de Sucre, lieutenant of Simon Bolivar. The country was then named after Bolivar, and the capital was named Sucre. Today, though Sucre is still the legal capital, the actual capital is La Paz.

Harassed by political insecurity, Bolivia lost great slices of territory to three neighbor nations. Several thousand square miles and its outlet to the Pacific were taken by Chile after a disastrous war in 1879-83. In 1903 a piece of Bolivia's Acre province was ceded to Brazil. And in 1935, at the end of a war with Paraguay, Bolivia gave up claim to nearly 100,000 square miles of the Gran Chaco.

Stormy in politics, the period since 1934 is typical of Bolivian political history. In that year Daniel Salamanca, the president, was overthrown by a clique under Luis Tejada Sarzano, vice president, who was toppled two years later by Colonel David Toro. Lieutenant Colonel German Busch sprang a coup in 1937 and seized the government. When he committed suicide two years after that, he was succeeded in disregard of the constitution by Carlos Quin-tanilla, defense minister. General Enrique Penaranda, legally elected in March, 1940, succumbed in 1943 to the rightest revolution headed by Major Gualberto Villarroel who then remained in office through political fraud, violence and terror. The end for him came on July 21, 1946, when he was killed in a bloody revolution of students and workers, who established a provisional government. No elected Bolivian president has ever served out his term.

Under a 1938 constitution, Bolivia is a republic electing by popular vote a president every four years, a 27-member Senate every six years, and a 70-member Chamber of Deputies every four years. The president appoints the eleven members of his cabinet, also the officials of the eight departments and three territories. The Supreme Court judges, chosen by two-thirds vote of the two houses of Congress, select the district court judges. Today the Supreme Court is about the only government agency left in the original capital at Sucre, all other functions having been moved to La Paz.

Military service is compulsory, with a two-year training period beginning at nine-

teen and service on reserve until fifty. The army is fixed by law at 15,000, and in 1939 the reserves numbered 82,187. The air force is being re-organized and trained by American officers. In 1945 the armed forces national budget share came to about 20 percent. Receipt of U. S. lend-lease military goods in 1941-45 totaled \$4,392,000.

Bolivia has an illiteracy rate estimated in 1945 at 80 percent, highest rate in all Latin America. A contributing factor is the high rate of pure Indian population. In 1942 enrollment at 1,766 primary schools was 160,283, and at seventy-seven intermediate schools, 1,255. There are five universities and several normal schools and educational centers for Indians.

Roman Catholicism is the state religion, but there is complete freedom of worship. The religious orders, never suppressed, maintain several convents. Spanish is the official language, but many Indian dialects are spoken. The country is dominated by the 450,000 white descendants of the early Spanish settlers. Broadly speaking, the whites are landowners and government officials; the mestizos are tradesmen, skilled workers, and minor civil officials; and the Indian majority, laborers. Recent government efforts to encourage immigration have been generally unsuccessful, although small settlements of Czechs, Germans and others have been established in the eastern territories.

Landlocked Bolivia is a low alluvial plain in 60 percent of its area toward the east, drained by the Amazon and Plata river systems. The western part, enclosed by two chains of the Andes, is a great plateau measuring 500 by 80 miles at an average altitude of 12,000 feet. More than 80 percent of the population is found on the plateau, which also contains La Paz, the highest seat of government in the world. Lake Titicaca, half the size of Lake Ontario, is the highest big lake in the world, at an altitude of 12,507 feet. Islands in the lake hold ruins of the ancient Incan civilization.

Bolivian climate ranges from the moist heat of the equatorial lowlands of the east to the Arctic cold of the snow-capped Andes. A dozen peaks 20,000 feet or higher lie all or partly in the country.

Mining is the backbone of the economy. From the mountain of Potosi alone an estimated \$2,000,000,000 worth of silver has been dug since colonial times. Tin, accounting for 70 percent of exports, is by far the most important today, most of it coming from the plateau regions of Potosi and Oruro. In World War II Bolivia stepped up production greatly, shipping out vast quantities of barrilla, an ore mechanically concentrated to yield 60 percent tin. In normal times, Bolivia is the world's third tin producer.

Mineral production for 1944 was: tin, 89,300 metric tons; silver, 6,800,000 ounces; gold, 5,000 ounces; copper, 6,200 metric tons; lead, 9,000 metric tons; antimony, 3,800 metric tons; tungsten concentrates, 7,900 metric tons; and zinc, 18,300 tons. Southern Bolivia is rich in oil, as yet relatively unexploited. Production in 1944 was 813,947 barrels.

The 5,000,000 acres under cultivation produce wheat, rice, sugar, potatoes, cacao, barley, maize, coca (source of cocaine), tobacco, and cotton. Cattle are raised in the more temperate regions of the east and south, sheep in La Paz and Cochabamba, and llamas, alpacas, and vicuñas, important sources of hides, wool and meat, are raised on the plateaus by Indians whose economy is largely dependent upon them. The fur-bearing chinchilla, a native of the higher plateau, is also bred.

Manufacturing received considerable impetus during the Chaco War, but the output is in no way sufficient to supply the domestic demand. Almost three-fourths of the manufacturing is carried on in La Paz. Major manufactures in 1941 had a value of \$11,298,280, led by foodstuffs, beverages, and textiles.

Imports in 1943 were 146,130,745 bolivianos and exports, 283,155,361 bolivianos. The principal supplier was Argentina, followed by the United States and Peru. Exports consisted almost entirely of tin and other minerals. In 1942, 45 percent of tin went to Britain and 55 percent to the United States, but before World War II Britain took most of the tin exports. Since Bolivia is landlocked, foreign trade must pass through free ports in Chile and river ports on the Amazon.

From its lowland tropical forests, Bolivia gets rubber, quinine bark, almonds and Brazil nuts, dyewoods, mahogany, quebracho and other hardwoods. Rubber exports in 1942 totaled 1,486 tons.

Railway mileage totals 1,867 miles, all in western Bolivia; the principal lines connect La Paz with the Chilean ports of Arica and Antofagasta. Highway mileage in 1945 was 3,710, much of it unimproved. Airlines play an important role in Bolivian transportation: national airlines, including the Lloyd Aéreo Boliviano, covered 3,495 route miles in 1943, and Pan American Airways links the country with the rest of the Americas. In the lowlands thousands of miles of navigable streams are the chief means of transportation. Telephones in 1942 numbered 2,680.

The 1945 budget totaled approximately 25,040,000. The public debt in 1939 was 132,757,552, mostly internal. American direct investments in 1940 were \$26,829,000; British investments in 1944 were £4,420,817. Revenue comes mainly from export duties on tin and other minerals.

Brazil (Republic)

(Estado Unidos do Brasil)

Area: 3,291,416 square miles.

Population (est. 1945): 45,300,000.

Density per square mile: 13.8.

President: Gen. Eurico Gaspar Dutra.

Principal cities (census 1940): Rio de Janeiro, 1,781,567 (capital and chief port); São Paulo, 1,318,539 (coffee growing center); Recife (Pernambuco), 352,727 (seaport); Salvador (Bahia), 294,253 (seaport); Porto Alegre, 275,678 (seaport); Campos, 225,443 (sugar); Belo Horizonte, 211,650 (mining); Belém (Pará), 208,706 (port for Amazon shipping).

Monetary unit: Cruzeiro.

Racial stock (est. 1939): White, 60%; Mixed, 25%; Negro, 12%; Indian and Asiatic, 3%.

Languages: Portuguese (official), Italian, German.

Religion: Roman Catholic.

Brazil, the only South American nation deriving its culture and language from Portugal, is by far the largest country in South America, covering nearly half the continent. In the Western Hemisphere it is second in area only to Canada. In the world, it is smaller than Russia, China and Canada. It is the world leader in the production of coffee, and its Amazon River is the longest single stream in the world, rising in Peru, flowing through unexplored jungles and emptying into the Atlantic on Brazil's populated and industrialized coast after a course of 3,900 miles.

Brazil was discovered on May 3, 1500, by the Portuguese admiral, Pedro Álvares Cabral. Portuguese colonization efforts began in 1532 and Brazil became a royal colony in 1549. Discovery of gold in 1630, and later discovery of diamonds and sugar cane stimulated colonial progress. King John VI, of Portugal, fleeing Napoleon's forces, set up his royal government in Rio de Janeiro in 1808 and stayed there until he was drawn home by a revolution attempt in 1820. The Brazilians, after holding the seat of Portuguese government, rebelled at resuming colonial status and declared their independence in 1822 under Pedro I, second son of King John VI. Harassed by trouble with his parliament, Pedro I abdicated in 1831 in favor of his five-year-old son who became emperor in 1840 as Pedro II. He proved to be an enlightened and popular monarch whose reign was perhaps the most progressive in Brazilian history.

PEDRO II TO VARGAS. Despite his good works, Pedro II was forced to abdicate in 1889 following a military revolt, after which a republic was set up. In the next few years the country passed through a difficult period of re-adjustment, and until 1893 Brazil was under two military dictators—Marshal Deodoro da Fonseca and Marshal Floriano Peixoto. After a revolt in 1893, Brazil was returned gradually

to stability by a succession of five civilian presidents—Prudente de Moraes Barros, 1894-98; Manuel Ferras de Campos Salles, 1898-1902; Francisco de Paula Rodrigues Alves, 1902-06; Afonso Penna, 1906-09, who died in office; and Nilo Pecanha, 1909-10.

The president during World War I, Dr. Wenceslao Braz, cooperated closely with the Allies and declared war on Germany on Oct. 26, 1917. Reckless expenditure marked the term of Dr. Epitacio da Silva Pessoa, 1919-22, while the presidency of Dr. Arthur Bernardes, 1922-26, was bedeviled by financial difficulties and army dissension. His successor, Dr. Washington Luiz Pereira da Souza, 1926-30, ran into the world depression and was deposed in his last year by a revolutionary group headed by Dr. Getulio Vargas who took over as provisional president.

Vargas' new constitution in 1934 sharply curtailed state's rights and emphasized a nationalistic policy. In 1937 Vargas seized absolute powers, setting up another constitution extending his term indefinitely. In World War II, Brazil cooperated well with the United Nations. Allied air bases were set up in Brazil, Brazilian naval forces patrolled the South Atlantic, and a Brazilian expeditionary force fought in Italy.

The fear that Vargas would never make good on his promise for free elections led to his overthrow on Oct. 29, 1945, and the transfer of his powers to Chief Justice Jose Linhares. In the subsequent elections, on Dec. 12, 1945, victory went to the Vargas candidate—General Eurico Gaspar Dutra, who was inaugurated as president on Jan. 3, 1946.

GOVERNMENT. Brazil is a federal union of twenty states, seven territories and one federal district. The legislature of forty-two senators and 286 representatives, popularly elected on Dec. 2, 1945, took office on Feb. 2 as a constituent assembly. Its first job was to adopt a new constitution and then it was to sit as a congress under the terms of that constitution. The president's term was to be determined by the constitution.

The twenty states, with popularly elected legislatures and governors, and with their own constitutions, have considerable autonomy, but during the Vargas regime they suffered from Federal intervention. An area of 200,000 square miles of borderland was taken away from several states on Oct. 1, 1943, and set up as five territories. These areas were Amapa bordering the Guianas; Rio Branco bordering Venezuela, Guapore bordering Peru and Bolivia, Ponta Pora bordering Paraguay and Argentina, and Iguacu bordering Argentina.

The other two territories are Acre on the Bolivia-Peru border, and Fernando de No-

ronha, 225 miles off the northeast coast from Cape São Roque.

AREA AND POPULATION OF STATES AND TERRITORIES OF BRAZIL, 1945

State or territory	Area (sq. mi.)	Pop. (Jan. 1, 1945)
North		
Acre (terr.)	57,153	88,700
Amazonas	595,474	463,900
Rio Branco (terr.)	97,438	15,100
Pará	470,752	1,017,200
Amapá (terr.)	55,489	25,600
Guaporé (terr.)	96,986	27,300
Northeast		
Maranhão	133,674	1,354,300
Piauí	94,819	900,600
Ceará	57,371	2,290,100
Rio Grande do Norte	20,236	844,100
Paraíba	41,591	1,561,400
Pernambuco	38,315	2,935,600
Alagoas	11,031	1,043,600
Fernando de Noronha (terr.)	7	1,200
East		
Sergipe	8,321	595,000
Bahia (Baía)	204,393	4,292,900
Minas Gerais	228,469	7,458,400
Espírito Santo	17,688	851,000
Rio de Janeiro (state)	16,372	2,030,200
Federal District	451	1,941,700
South		
São Paulo	95,459	7,890,200
Iguaçu (terr.)	25,426	93,200
Paraná	57,315	1,316,100
Santa Catarina	31,118	1,242,800
Rio Grande do Sul	110,150	3,651,100
Central-West		
Goiás	225,266	907,800
Mato Grosso	446,317	366,100
Ponta Porã (terr.)	39,088	94,800

DEFENSE. Military service is compulsory beginning at twenty-one with an initial training period of one year and service on reserve until forty-five. The permanent army of 112,300 men and 258,000 reserves in 1940 was greatly expanded in World War II. The army is well equipped with modern U. S. lend-lease military goods. The air force, under a separate Ministry of Aviation since 1941, also expanded during World War II and its aviators fought in Italy. In December 1944 the air force took over full Allied responsibility for the aerial defense of the South Atlantic.

The navy on Dec. 31, 1945 had two old battleships of 20,000 tons each, two old light cruisers, twelve destroyers, four submarines, six corvettes, and some smaller craft. During World War II about thirty

warships were acquired, mostly from the United States, including sub-chasers, corvettes and destroyers. Naval dockyards are at Ilha das Cobras (Rio de Janeiro), Pará, and Ladario de Matto Grosso (a river base).

EDUCATION. The educational system is a composite of federal centralization and state autonomy. Education is free and in some states compulsory. It was estimated in 1944 that 3,710,000 students were attending 40,000 schools, of which 39,000 were primary schools and the rest secondary, vocational, and universities. All of the 7 universities are state institutions except the federalized University of Brazil at Rio de Janeiro. Illiteracy in 1940 was officially estimated at less than 50 percent.

RELIGION. The overwhelming majority of the population is Roman Catholic, but religious toleration has long prevailed.

RACIAL STOCK. The racial character of the people varies considerably from section to section: whites predominate in the southern states, Indians in the Amazon, and Negroes in the central and northern coastal states. From 1820 to 1937 there were 4,603,404 immigrants, of whom 32.6 percent were Italian, 30.3 percent Portuguese, 12.9 percent Spanish, 4.9 percent German, 3.9 percent Japanese, and 2.5 percent Russian. Immigration is now limited by a quota system established in 1938. Of the whole population, 22 percent is urban, 49 percent suburban, and 69 percent rural.

AGRICULTURE. Agriculture is the basis of Brazil's economy, but of its 2,000,000,000 acres, only 4 percent is actually under cultivation, the rest being grazing, forest, or economically valueless land. Brazil leads the world in production of coffee and castor beans, and ranks second in cacao. About 9,000,000 acres are devoted to the production of coffee. The 1944-45 crop was 14,000,000 bags of 132 pounds each. The government controls its sale and destroys large stocks (77,330,547 bags from 1931 to 1943) to maintain the price. The 1944-45 cacao crop, grown largely in Bahia, was estimated at 1,850,000 bags. Sugar cane production in 1944 was 1,300,000 metric tons, sold locally or converted into alcohol. Almost 10 million acres are planted with corn (1943-44: 200 million bushels), of which Brazil is the second largest producer in the Western Hemisphere. Other crops include tobacco (est. 1944: 100,000 metric tons); rice (est. 1944: 1,800,000 metric tons); cotton (1944: 2,675,000 bales), beans, mandioca, citrus, fruits, bananas, coconuts and wheat.

Livestock is raised nearly everywhere, but the great centers of the industry are in the central and southern states. There were in 1938 41,883,000 cattle, 23,543,000 wine, 14,167,000 sheep, 6,713,000 horses, and 5,906,000 goats.

MANUFACTURING. Manufacturing is still primarily for domestic consumption, but

industrialization is progressing rapidly. There were in 1943 more than 100,000 factories of all types employing about 1,500,000 workers whose products were valued at over \$1,600,000,000. The leading industrial products were foodstuffs, textiles, chemicals and pharmaceutical products, metallurgical products, clothing, leather, glass and porcelain, paper and rubber articles. The most important is cotton weaving (1942 output: 159,809 tons of yarn and 889,137 square yards of cloth).

TRADE. Exports in 1943 aggregated 8,728,569,000 cruzeiros and imports, 6,073,328,000 cruzeiros. The chief customers were United States 52 percent, Britain 14 percent, and Argentina 9 percent, while the chief suppliers were United States 54 percent, Argentina 18 percent, and Britain 7 percent. Principal exports were coffee 32 percent, textiles 12.6 percent, raw cotton 4.7 percent, cacao 3.9 percent, rock crystal, processed meats, vegetable oils, carnauba wax, and rubber. Coffee has declined in relative importance in recent years. Leading imports include machinery, miscellaneous manufactures, foodstuffs (largely Argentine wheat) and petroleum products.

COMMUNICATIONS. Coastwise and river steamers are the main links between north and south Brazil and especially within the Amazon basin where inland waterways are the only means of land communication. Navigable waterways total 26,713 miles. The merchant marine in 1939 was 305 ships of 487,820 tons, many of them owned by the state-controlled Lloyd Brasileiro. Coastwise traffic is restricted to Brazilian ships, but traffic on the Amazon is open to all ships.

Railway mileage in 1945 totaled 21,750, mostly of one meter gauge and located south of Bahia. Railway development has been hampered by natural obstacles, especially by coastal mountains, but extensive building is in process by the government, which owns 70 percent of the mileage, and by private industry. Highways in Brazil total 37,280 miles, and common roads, about 124,000 miles. In 1944 seven air lines serving Brazil carried 116,195 passengers. The government air force operates mail schedules over domestic routes that are commercially unprofitable. Communication facilities included 38,754 miles of telegraph line in 1939, a 1941 total of sixty-three broadcasting stations and 500,000 radio sets, and 331,000 telephones in 1943.

FINANCE. Recent statistics: estimated 1945 revenue, 8,232,399,000 cruzeiros; estimated expenditure, 8,205,298,000; foreign debt as of June, 1944, 1,990,968,797 cruzeiros; American direct investments in 1944, \$240,000,000; British investments in 1944, 229,147,252 pounds. The income tax is the government's chief source of revenue. During World War II, Brazil ranked fifth in the world in receiving U. S. lend-lease

goods. Its share totaled \$319,494,000, almost three times as much as was received by all other Latin American nations combined.

TOPOGRAPHY. The most populous of Latin American nations, Brazil covers about three-sevenths of the continent, extends 2,965 miles north-south, 2,691 miles east-west, and borders every South American state except Chile and Ecuador. Its area would blanket the United States, with nearly enough left over to make another Texas. Its state of Amazonas would make nearly five Californias. Brazil has two principal physical divisions. The lowlands are made up of the heavily forested tropical river basin of the Amazon, the world's largest drainage area; and the less heavily forested basin of the La Plata to the south. The highland is a vast plateau, 1,000 to 3,000 feet high, traversed by several low mountain ranges, and extending almost from the seacoast to the Bolivian frontier and south to the plains of Rio Grande do Sul. The plateau is more than half of the country and, with the narrow coastal plain, supports 90 percent of the population. In the extreme northeast are the relatively undeveloped Guiana highlands. Brazil's 3,642-mile coast line, twice the distance from Portland, Me., to Key West, Fla., is indented with many bays, nearly landlocked and making fine harbors.

CLIMATE. Brazil is almost wholly in the torrid zone, but such factors as altitude, prevailing winds, rainfall and distance from sea combine to make climate variation ranging from tropical to temperate. Manaus on the Amazon has average temperature of 80.9 degrees and annual rainfall of 71.65 inches. The corresponding figures for Rio de Janeiro are 72.5 degrees and 44 inches. In much of the Amazon basin rainfall averages 80 inches; in a few areas, over 100 inches.

RIVERS. More than a third of Brazil is drained by the Amazon and its more than 200 tributaries. The river, rising in the Peruvian Andes where it is called Rio

Maranon, is navigable for ocean steamers to Iquitos, 2,300 miles upstream, and open for river boats drawing fourteen feet, for 500 miles more. Southern Brazil is drained by the La Plata system—the Paraguay, Uruguay and Paraná Rivers. The most important stream entirely within Brazil is the São Francisco, navigable for a thousand miles but broken near its mouth by the 260-foot Paulo Affonso Falls, with estimated potential 1,000,000 horsepower.

MINERAL RESOURCES. Brazil's vast mineral resources are among her least developed assets. The most important are coal (estimated reserves of 5,000 million tons; estimated 1944 production, 1,860,000 metric tons) and iron ore, found chiefly in Minas Gerais (1943 output: 784,000 metric tons). The Volta Redonda steel plant, established with the aid of a loan from the U. S. Export-Import Bank, went into production in 1946 with an annual capacity of 350,000 tons of steel ingots. Other important minerals are manganese ore (1944: 147,000 metric tons); gold (1944: 178,000 oz.); diamonds (1943: 275,000 carats); bauxite (1944: 5,000 metric tons); tungsten (1944: 2,200 metric tons); quartz crystals (1941: 1,980 tons); uranium; chrome ore; graphite, and titanium.

FORESTS, FISHERIES. Over half of Brazil's area is forested, but the extensive forest resources are relatively undeveloped. The largest single forest commodity is timber, chiefly pine from the southern states, and the wax of the carnauba palm, used for insulation and phonograph records and produced commercially only in Brazil (1941 exports: 11,766 tons). Rubber production, mostly in the Amazon basin, was estimated in 1945 at 50,000 metric tons, but it has not developed as extensively as was once expected. Other forest products are Brazil nuts, yerba maté, medicinal plants, and vegetable oils.

There are vast fishing banks and grounds in the rivers and sea. The government-owned fishing industry's annual average catch is 3,000,000 kilos.

Western Hemisphere Census Planned for 1950

Source: U. S. Bureau of the Census.

The greatest census project in history, consisting of the simultaneous enumeration of the people of all the nations of the Western Hemisphere, is planned to be taken at the same time as the general census of the United States in 1950. The idea of a hemispherical census was first proposed by Dr. Alberto Arco Parro, Chairman of the Inter-American Institute's Committee on Demographic Statistics. Dr. Parro's proposal was that each of the 22 American nations plan a complete census for 1950; that in this census certain standards be adopted by all the countries, thereby procuring inter-American comparability of data. This hemispherical census would embrace not only population, but agriculture, including livestock and forest products; production, distribution, and utilization of crops; basic facts as to trade in food products, fibers, and other raw materials; nutrition, health, sanitation, shelter, standards of living, and teaching. The proposal was approved by the American nations in the first Inter-American Demographic Congress, which met in Mexico City, October 1943.



Rulers of England

Name	Born	Ruled	Name	Born	Ruled
Anglo-Saxons			House of York		
1 Alfred the Great	849	871- 901	31 Edward IV	1441	1461-1483
2 Edward the Elder	870	901- 925	32 Edward V	1470	1483-1483
3 Athelstan	895	925- 940	33 Richard III	1452	1483-1485
4 Edmund I	923	940- 946	House of Tudor		
5 Edred	?	946- 955	34 Henry VII	1457	1485-1509
6 Edwy the Fair	939	955- 958	35 Henry VIII	1491	1509-1547
7 Edgar	943	958- 975	36 Edward VI	1537	1547-1553
8 Edward the Martyr	961	975- 979	37 Mary I	1516	1553-1558
9 Ethelred the Unready	968	979-1016	38 Elizabeth	1533	1558-1603
10 Edmund Ironside	989	1016-1016	House of Stuart		
Danes			39 James I	1566	1603-1625
11 Canute	995	1017-1035	40 Charles I	1600	1625-1649
12 Harold I, Harefoot	?	1035-1040	Commonwealth		
13 Hardicanute	1019	1040-1042	41 Oliver Cromwell	1599	1653-1658
Saxons			42 Richard Cromwell	1626	1658-1659
14 Edward the Confessor	1004	1042-1066	House of Stuarts Restored		
15 Harold II	1022	1066-1066	43 Charles II	1630	1660-1685
Normans			44 James II	1633	1685-1688
16 William the Conqueror	1027	1066-1087	45 William III	1651	1689-1702
17 William Rufus	1056	1087-1100	Mary II	1661	
18 Henry I	1068	1100-1135	46 Anne	1665	1702-1714
19 Stephen	1105	1135-1154	House of Hanover		
Plantagenets			47 George I	1660	1714-1727
20 Henry II	1133	1154-1189	48 George II	1683	1727-1760
21 Richard, Lionhearted	1157	1189-1199	49 George III	1738	1760-1820
22 John Lackland	1166	1199-1216	50 George IV	1762	1820-1830
23 Henry III	1207	1216-1272	51 William IV	1765	1830-1837
24 Edward I, Longshanks	1239	1272-1307	52 Victoria	1819	1837-1901
25 Edward II	1284	1307-1327	House of Saxe-Coburg		
26 Edward III	1312	1327-1377	53 Edward VII	1841	1901-1910
27 Richard II	1366	1377-1399	House of Windsor		
House of Lancaster			54 George V	1865	1910-1936
28 Henry IV	1367	1399-1413	55 Edward VIII	1894	1936-1936
29 Henry V	1387	1413-1422	56 George VI	1895	1936-
30 Henry VI	1421	1422-1461			

Definitions

COLONY: a company of people, purposely or otherwise, transplanted from their mother country and remaining subject to the jurisdiction of the parent state.

CROWN COLONY: a British Empire colony in which the crown retains some kind of control over legislation.

DOMINION: an autonomous community within the British Empire, equal in status to any other dominion, but united by a common allegiance to the crown.

PROTECTORATE: a relation of a superior authority assumed by one power, in which the former protects the latter from domestic or foreign disturbance or dictation, and shares in the management of its affairs.

MANDATE: an order or commission granted by the League of Nations (before its defunction) as mandator to a member nation.

SPHERE OF INFLUENCE: a territory within which the political influence or the interests of one nation are permitted by other nations to be more or less exclusive. Also loosely used to denote regions more or less under the control of a nation but not constituting a formally recognized protectorate or suzerainty.

SUZERAIN: a state that exercises political control over another state in relation to which it is sovereign.

TRUSTEESHIP: administration by a member of the United Nations of an area not yet ready for self-government.

BRITISH COMMONWEALTH OF NATIONS

Political subdivision	Area (sq. mi.)	Population (est. 1939)	Political subdivision	Area (sq. mi.)	Population (est. 1939)
Europe					
United Kingdom	93,667	48,162,000*	Newfoundland and Labrador	152,734	320,022**
Gibraltar	93,667	20,339	Trinidad and Tobago	1,978	535,499†
Malta	122	272,121**	Windward Islands (Grenada, Dominica, St. Vincent, St. Lucia)	821	275,000‡
Africa					
Anglo-Egyptian Sudan	967,500	6,370,041†	Asia		
Asiutoland Protectorate	11,716	290,000	Aden	80	65,000
Bechuanaland Protectorate	275,000	275,000	Aden Protectorate	112,000	600,000
Cambodia	4,068	205,000	Bahrein Islands	213	90,000†
Gold Coast (including Togoland)	91,843	3,572,000*	Borneo		
Kenya	224,960	3,724,000**	State of North Borneo	29,347	302,000
Mauritius	807	426,000**	Brunei	2,226	39,000
Nigeria (including British Cameroons)	372,674	21,040,720†	Sarawak	50,000	490,585
Northern Rhodesia	290,320	1,381,829*	Burma	261,610	16,824,000†
Nyasaland	36,829	2,184,000**	Ceylon	25,332	6,197,000**
St. Helena	126	4,831	Cyprus	3,572	393,249**
Seychelles	156	32,150*	Hong Kong	391	980,000†
Sierra Leone	27,925	2,000,000	India	1,581,410	388,997,955†
Somaliland Protectorate	67,936	350,000	Malaya		
Southern Rhodesia	150,333	1,579,000**	Malayan Union	50,680	4,697,289†
South-West Africa	317,725	321,000†	Singapore and dependencies	282	771,798†
Swaziland	6,705	160,000	Palestine	10,159	1,676,571**
Tanganyika	342,706	5,321,203‡	Oceania		
Uganda Protectorate	80,301	3,898,333‡	Australia	2,974,851	7,306,637†
Union of South Africa	472,550	10,889,000**	Fiji Islands	7,055	240,641†
Zanzibar	1,020	250,000	Gilbert and Ellice Islands	312	35,000
America					
Norfolk Island			Nauru	8	3,000
Antigua and Barbuda	4,404	70,619**	New Guinea, Territory of	93,000	804,000**
Barbados	166	202,588†	New Hebrides Condominium	5,700	50,000
Bermudas	19	33,925†	New Zealand	103,410	1,655,794||
British Guiana	89,480	364,694**	Norfolk Island	13	1,059
British Honduras	8,598	63,390†	Papua	90,540	338,822*
Canada	3,466,882	11,812,000**	Solomon Islands	11,000	95,000
Cook Islands	7,681	2,804**	Tonga	250	39,191‡
Jamaica	4,722	1,250,209**	Western Samoa	1,133	62,000**
Leeward Islands	422	100,497†			

*Pop. 1940. †Pop. 1941. ‡Pop. 1942. **Pop. 1943. ‡Pop. 1944. ||Pop. 1945.

EUROPE

United Kingdom of Great Britain and Northern Ireland

Area: 93,991 square miles.

Population (est. 1941): 47,755,000.

Density per square mile: 508.1.

Ruler: King George VI.

Prime Minister: Clement R. Attlee.

Principal cities (est. 1938): London (Greater), 5,555,000 (capital); Glasgow*, 1,131,800 (seaport, shipbuilding); Birmingham, 1,041,000 (iron and steel); Liverpool, 827,400 (seaport); Manchester, 732,900 (cotton textiles); Sheffield, 600,000 (steel, cutlery); Leeds, 494,000 (whole-cloth clothing); Edinburgh, 475,500* (capital, Scotland).

Monetary unit: Pound sterling.

Racial stock: English, Scotch, Welsh, Irish.

Language: English.

Religion: Protestant Episcopal (established Church).

*Estimated 1940.

HISTORY. The history of Britain is obscure until the Roman invasions of the 1st century B. C. brought it in contact with the continent. When the Roman legions withdrew in the 4th century A. D., the inhabitants were left weak and divided and they fell easy prey to the invading hordes of Angles, Saxons and Jutes from Scandinavia and the Low Countries. Seven large kingdoms were established and the orig-

inal Britons were forced into Wales and Scotland. It was not until the 11th century that the country became finally united under the Danish King Canute. Following the death of the Anglo-Saxon King, Edward the Confessor, a dispute as to the succession arose, and William, Duke of Normandy, invaded England, defeating the Saxon Harold at the battle of Hastings (1066). The Norman conquest was accompanied by the introduction of Norman law and of feudalism. The reign of Henry II (1154-1189), the first of the Plantagenets, saw an increasing centralization of royal power at the expense of the nobles, but in 1215 John (1199-1216) was forced to sign the Magna Charta—the basis of the English constitution—which awarded the people and especially the nobles certain basic rights. Edward I (1272-1307) continued the conquest of Ireland, reduced Wales to subjection, and made some gains in Scotland. In 1314, however, English forces led by Edward II were ousted from Scotland at the battle of Bannockburn. The late 13th and the early 14th centuries saw the development of a separate House of Commons with tax-raising powers. Edward III's claim to the throne of France led to the Hundred Years' War (1338-1453) which ended with the loss of almost all the large English territory in France. The war caused great poverty and discontent in England which was increased by the Black Death, a plague which reduced the population by about one-third. The Wars of the Roses (1455-1485), a struggle for the throne between the great barons of the Houses of York and Lancaster, were ended by the victory of Henry Tudor at Bosworth Field (1485). His son Henry VIII (1509-1547) broke with the papacy and cut off England from the Roman Church when the Pope refused to allow him to divorce his first wife, Catherine of Aragon. Under Edward VI and Mary, the two extremes of religious fanaticism were reached and it remained for Henry's daughter, Elizabeth (1558-1603), to settle the Church of England on a moderate basis. In 1588 the Spanish Armada, a fleet sent out by Catholic King Philip II of Spain, was defeated by the English and destroyed by a storm.

Elizabeth's heir was of the house of Stuart—James VI of Scotland—who joined the two crowns as James I (1603-1625). The Stuart kings were neither popular, tactful, nor economical. Their failure to avoid large debts forced them either to depend on Parliament for grants of taxes or to raise money by illegal means. In 1642 war broke out between Charles I and a large portion of the Parliament; Charles was defeated and executed in 1649. The Puritan Commonwealth endured for ten years, but with the death in 1658 of Oliver Cromwell, the Lord Protector, the government fell to pieces and Charles II was restored in 1660.

The struggle between the King and Parliament continued, but Charles II knew when to compromise. His brother James II (1685-1688) possessed none of this ability and he was ousted by the Revolution of 1688 which confirmed the predominant position in the nation of Parliament. James' daughter Mary and her husband William of Orange now ruled jointly. The reign of Queen Anne (1702-1714) was marked by the victories over France of John Churchill, Duke of Marlborough, at Blenheim, Oudenarde, and Ramillies in the War of the Spanish Succession. England and Scotland were joined together by the Act of Union (1707). Upon the death of Anne (1714), the distant claims of the elector of Hanover were recognized and George I became King of England.

The 18th century was a period of gradual growth and change. At home the unwillingness of the German kings to rule resulted in the formation by the King's ministers of a cabinet, headed by a prime minister, which directed all public business. Abroad the constant wars with France resulted in the expansion of the British Empire all over the globe, and particularly in North America and India. This imperial growth was checked by the revolt of the American colonies (1776-83). The age-long struggle with France broke out again in 1793, and during the lengthy Napoleonic Wars, which ended at Waterloo (1815) England was pitted at one time against almost all of Europe.

The Victorian era, named after Queen Victoria, who reigned from 1837 to 1901, saw the growth of a democratic system of government, which began with the Reform Bill of 1832. The two important wars in Victoria's reign were the Crimean War against Russia (1853-56) and the Boer War (1899-1902). The latter was the result of England's imperialist expansion in South Africa which was accompanied by enormous extension of her dominions throughout Africa.

The reign of Edward VII (1901-1910) was marked by increasing uneasiness at home and abroad. Within four years after the accession of George V (1910), England entered World War I after Germany invaded Belgium whose neutrality she had guaranteed. The nation was led by coalition cabinets headed first by Herbert Asquith and then (Dec. 7, 1916) by the Welsh statesman, David Lloyd George. The years after the war were marked by quarrels and strikes in industry which culminated in a general strike that almost paralyzed industry in 1926. The Labor (socialist) ministry formed early in 1924 by Ramsay MacDonald fell in October after the publication of the Zinoviev letter which aroused fear of a "Red" peril in Britain. In 1929 a second Labor government was formed but the world economic

depression in 1931 forced a change and a national government was formed composed chiefly of Conservative members. King Edward VIII succeeded to the throne in 1936 on his father's death but abdicated eleven months later in favor of his brother, who became King George VI.

The efforts of Neville Chamberlain to meet by peaceful means the rising tide of Nazism in Germany failed with the German invasion of Poland (Sept. 1, 1939), which was followed by England's entry into World War II (Sept. 3, 1939). Serious Allied reverses in the spring of 1940 led to Chamberlain's resignation and the formation of another coalition war cabinet by Conservative leader Winston Churchill, who led England through most of World War II. Churchill resigned as the coalition leader shortly after V-E Day, but then formed a "caretaker" government which remained in office until after the parliamentary elections on July 5, 1945 in which the Labor party won an overwhelming victory. The Labor government formed by Clement R. Attlee after the official returns on July 26 embarked upon a socialistic program at home and fought to maintain the Empire's position abroad.

AREA AND POPULATION OF MAJOR SUBDIVISIONS, (Estimate of 1938)

Subdivision	Area	Population
England	50,870	39,050,780
Wales	7,469	2,063,420
Scotland	29,794	5,040,000*
Northern Ireland	5,238	1,295,000†

* 1948. † 1939.

GOVERNMENT

RULER. King George VI, born December 4, 1895, second son of King George V and Queen Mary; succeeded to the throne on the abdication of his brother King Edward VIII December 10, 1936; married April 26, 1923 to Lady Elizabeth Bowes-Lyon (born Aug. 4, 1900). Children: (1) Princess Elizabeth Alexandra Mary, born April 21, 1926 (heir presumptive); (2) Princess Margaret Rose, born August 21, 1930. The King's living brothers are Prince Edward Albert, Duke of Windsor (formerly King Edward VIII), born June 23, 1894 and Prince Henry William, Duke of Gloucester, born March 31, 1900.

NATIONAL GOVERNMENT. The United Kingdom is a constitutional monarchy, with a king and a parliament consisting of two houses: the House of Lords consisting of about 670 hereditary peers, 24 spiritual peers, 16 Scottish representative peers, a number of Irish representative peers (vacancies are no longer filled), and a few life peers who have held high judicial office;

and the House of Commons, numbering 640 members, elected by practically universal suffrage. Supreme legislative power is vested in Parliament, which holds office for five years unless sooner dissolved. The executive power of the Crown is exercised by the Cabinet headed by the Prime Minister. The latter, normally the head of the party commanding a majority in the House of Commons, is appointed by the sovereign with whose consent he in turn appoints the rest of the ministry. All ministers must be members of one or the other houses of Parliament; they are individually and collectively responsible to crown, Prime Minister and Parliament. The Cabinet proposes bills and arranges the business of Parliament but it depends entirely on the votes of confidence in the Commons. By an act passed in 1911 the lords cannot hold up "money" bills, but they can delay other bills for a period of two years.

By the Act of Union (1707) the Scottish parliament was assimilated with that of England, and Scotland is now represented in the Commons by 74 members. The Secretary of State for Scotland, a member of the Cabinet, is responsible for the administration of Scottish affairs.

PARTY STANDING IN HOUSE OF COMMONS (Elections July 1945)

Party	Seats
Labor	393
Conservative	197
Liberal National	13
Liberal	11
National	6
Independent Labor	3
Communist	2
Commonwealth	1
Independents	14
	640

NOTE: The votes received by each party in the July 1945 elections were as follows: Labor, 11,967,985; Conservative, 9,087,238; Liberal National, 759,884; Liberal, 2,227,400; Independent Labor, 46,679; Communist, 102,780; Commonwealth, 110,634; Independents, 625,250.

The members of the Cabinet are: Clement Richard Attlee (Prime Minister, First Lord of the Treasury), Herbert Stanley Morrison (Lord President of the Council), Ernest Bevin (Secretary of State for Foreign Affairs), Arthur Greenwood (Lord Privy Seal), Edward Dalton (Chancellor of the Exchequer), Sir Richard Stafford Cripps (President of the Board of Trade), Lord Jowitt (Lord Chancellor), Albert Victor Alexander (Minister of Defence), James Chuter Ede (Secretary of State for the Home Department), Viscount Addison (Secretary of State for Dominion Affairs),

Lord Pethick-Lawrence (Secretary of State for India and Burma), A. Creech Jones (Secretary of State for the Colonies), Capt. Frederick John Bellenger (Secretary of State for War), Philip Noel-Baker (Secretary of State for Air), Joseph Westwood (Secretary of State for Scotland), George Alfred Isaacs (Minister of Labour and National Service), Emanuel Shinwell (Minister of Fuel and Power), Ellen Wilkinson (Minister of Education), Aneurin Bevan (Minister of Health), and Thomas Williams (Minister of Agriculture). Several other ministers do not hold cabinet rank.

LOCAL. England and Wales are divided into 62 administrative counties, including the county of London, and 83 county boroughs. The counties are administered by the justices and by popularly elected county councils. All incorporated towns are administered by a municipal corporation consisting of the mayor, aldermen, and burgesses. Local government in Scotland is comparable to that in England and Wales.

JUDICIARY. The ultimate court of appeal in the judicial system is the House of Lords, while the final court of appeal for Indian and certain of the Dominions is the Judicial Committee of the Privy Council. Below the House of Lords on the civil side is the High Court of Judicature, divided into two parts, the Court of Appeal, and the High Court of Justice which in turn has three divisions: (1) Chancery, (2) Kings Bench, (3) Probate, Divorce, and Admiralty. On the criminal side is the Court of Criminal Appeal, which is the court of last resort barring the allowance of an appeal to the Lords (three allowed since 1907) on the intervention of the Home Secretary who exercises the royal prerogative. Actually these superior courts hear only a small fraction of the cases, and most of the trials are held in a complicated system of inferior courts, exercising original jurisdiction. The Lord Chancellor, Lord Chief Justice, Lords of Appeal in Ordinary (law members of House of Lords) and Lord Justices of Appeal are appointed by the Prime Minister; others, by the Lord Chancellor.

DEFENSE. Compulsory military service, introduced in May 1939, is still in effect although in mid-1946 it was contemplated that only 17 and 18 year olds would be called up during 1947 and 1948. The armed forces are comprised of three separate services—the Army, the Royal Navy, and the Royal Air Force. Coordination of these services through the appointment to the Cabinet of a Minister of Defence was projected in a White Paper issued Oct. 5, 1946. While the Prime Minister retains supreme responsibility for defense, the Defence Minister is to have coordinating and executive duties including (1) apportionment in broad outline of available resources between the three services; (2)

settlement of questions of general administration on which a common policy for the three services is desirable; and (3) administration of inter-service organizations, notably Combined Operations and the Joint Intelligence Bureau. Service ministers are no longer Cabinet members but continue to be members of the Defence Committee headed by the Prime Minister with the Defence Minister as deputy chairman; this committee is responsible to the Cabinet both for the review of current strategy and for coordinating departmental action in preparation for war. The Chiefs of Staff Committee, analogous to the U. S. Joint Chiefs of Staff, remains responsible for preparing strategic appreciations and military plans and submitting them to the Defence Committee.

Budget estimates for the fiscal year 1946-47 follow:

	Estimate	Strength*
Navy	£255,075,000	492,800
Army	682,000,000	2,950,000
Air	255,500,000	760,000

*Maximum during period.

Control of the land forces is exercised by the Army Council headed by the Secretary of State for War. Its members include the Chief of the Imperial General Staff, the Adjutant General and Quartermaster General.

The Royal Navy is controlled by the Board of Admiralty headed by the First Lord of the Admiralty, who is responsible to Parliament. The fourteen other members include the First Sea Lord and Chief of Naval Staff. The Royal Navy (Dec. 31, 1945) included 13 battleships, 1 battle cruiser, 14 fleet aircraft carriers, 42 escort carriers, 63 cruisers, 300 destroyers and 150 submarines. War losses totaled 3,282 vessels, including 3 battleships, 2 battle cruisers, 5 fleet carriers, 23 cruisers, 134 destroyers and 77 submarines.

Control of the Royal Air Force is vested in an Air Council analogous to the Army Council and headed by the Secretary of State for Air. The Fleet Air Arm was transferred to the Royal Navy in 1937.

The total strength of the armed forces (Aug. 31, 1939) was 681,000. Between that date and June 30, 1945 another 5,215,000 men were taken in. Of the total of 5,896,000, 923,000 served in the Royal Navy, 3,788,000 in the Army and 1,185,000 in the Royal Air Force. The Women's Auxiliary Forces added 619,000 to their 1939 strength of 21,000.

CASUALTIES OF WORLD WAR II

Source: British Government White Paper
June 6, 1946.

	Navy	Army	R.A.F.	Total
Killed	50,758	144,079	69,606	264,443
Wounded	14,663	239,575	22,839	277,077
Prisoner	7,401	152,076	13,115	172,592
Missing	820	33,771	6,736	41,327
	73,642	569,501	112,296	755,439

SOCIAL AND ECONOMIC CONDITIONS

EDUCATION. In 1937-38: elementary, England and Wales—departments under separate head teachers, 29,988, scholars on register 5,150,874; elementary, Scotland—schools 2,895, scholars 617,047; elementary, Northern Ireland—schools 1,700, scholars 491,862; secondary, England and Wales—grant-aided schools 1,398, scholars 470,003; secondary, Scotland—grant-aided schools 552, scholars 156,645; secondary, Northern Ireland—grant-aided schools 75, scholars 24,557; universities, students: England 41,307 (full-time, 36,378); Wales 3,089 (full-time 2,970); Scotland, 10,384 (full-time, 8,841); Northern Ireland, 1,590 full-time students.

AGRICULTURE. In spite of the rapid growth of manufacturing and commerce, agriculture remains one of Britain's chief industries, employing well over 1,000,000 persons. The area devoted to it in 1938 was about four-fifths of the country's land—over 45,334,000 acres out of a total area of 56,200,000 acres. In 1945 land under the plow amounted to 19.2 million acres; permanent grassland, 11.8 million acres. In Scotland over two-thirds of the land used for agriculture is uncultivated rough grazings; while over two-thirds of the cultivated area is arable land, in England and Wales three-fifths of the cultivated land is under permanent grass and only one-sixth of the total agriculture land is rough grazings. The value of the agricultural output of Great Britain was estimated in 1938 at from £270,000,000 to £280,000,000. Of this output livestock and livestock products accounted for the bulk—at least 70 percent. Nearly one-half the total wheat and barley acreage is to be found in the ten eastern counties of England, but the acreage of oats is fairly evenly distributed over the whole country.

LEADING AGRICULTURAL PRODUCTS,

1938 AND 1943

(in 1,000 tons)

Product	1938	1943
Wheat	2,040	3,855
Oats	1,176	3,419
Barley	12	106
Potatoes	883	1,834
Beet sugar	3,843	10,978
Wool	333	605
	55	42

Livestock (1945) included 9,624,000 cattle, 20,053,000 sheep, 2,152,000 pigs, 918,000 horses (1944), and 62,296,000 poultry. Cattle alone occupy a predominant position in British agriculture, accounting for about 1 percent of the total farm output. Production of cheese (1938) was 48,500 tons, butter 52,000 tons, beef and veal 757,000 tons, and mutton and lamb 283,000 tons.

Large quantities of foodstuffs normally are imported, but during World War II an extensive plowing-up campaign was inaugurated with the result that by 1942 an extra 6,000,000 acres had been brought under cultivation. It was estimated that increased production in 1942 represented a saving of 5,000,000 tons of shipping space.

INDUSTRY. Great Britain is second only to the United States among the industrial nations of the world. The most important manufacture is heavy goods such as machinery, tools, bridges, locomotives and tin-plates; the industry is concentrated in the north and Midlands of England. Sheffield is the center of the steel industry, while the china industry is concentrated in the Midlands. The cotton industry is centered in Lancashire; Liverpool, Manchester, Oldham, Preston, and Bolton are the main manufacturing towns. The wool industry, England's oldest large trade, is located just east of the cotton towns, at Leeds, Bradford and Hull in Yorkshire. An important industrial region is the central Lowlands of Scotland where woollens, silks, linens, cottons and lace; glass and paper; steel and pig iron are produced. Important shipyards are located along the coast, and the United Kingdom normally launches over one-third of the world's new merchant vessels each year.

Pig iron production (1943) was 7,187,000 tons, and steel ingots and castings 13,031,000 tons. In 1937 there were 442 open hearth furnaces. The total output of finished steel products (1938) was 7,491,400 tons.

MAJOR MANUFACTURES, 1935

Products	Number of workers*	U. S. dollars
Beverages, Food and Tobacco	520,649	3,253,535,437
Building	249,439	416,285,365
Chemical	194,011	953,684,404
Clothing	535,886	877,990,809
Engineering and Transportation	1,104,363	2,408,832,752
Leather	50,533	168,425,848
Metal	661,367	1,904,383,613
Textile	1,054,860	2,186,041,041
Wood and Paper	603,861	1,288,996,935
Miscellaneous	182,619	449,083,309
Total	5,157,587	13,907,259,513

*In establishments employing 10 or more persons.

TRADE. The United Kingdom's economic prosperity is dependent on its foreign trade. Overseas trade for 1938 and for the years 1941-44 is shown in the next table. Principal exports (1938) were machinery 12.8 percent, iron and steel and manufactures 8.8 percent (2,111,000 tons), coal 7.9 percent (39,524,000 tons), cotton cloth 6.8 percent (145,000 tons), vehicles 4.3 percent, woolen and worsted cloth 3.3 percent,

electrical goods and apparatus 2.9 percent and cotton yarns and thread 2.8 percent. Leading imports included butter 5.5 percent (533,000 tons), raw wool 4.5 percent (441,000 tons), petroleum 4.4 percent (2,635,552,000 gal.), wheat 4.2 percent (5,691,000 tons), bacon 3.4 percent (385,000 tons), tea 3.3 percent, raw cotton 3.1 percent (603,000 tons) and beef (chilled and frozen) 2.6 percent (687,000 tons). Leading customers were Union of South Africa 8.4 percent, Australia 8.1 percent, India 7.2 percent, Canada 4.8 percent, Germany 4.6 percent, United States 4.4 percent, Elre 4.3 percent, and Argentina 4.1 percent. Leading suppliers were United States 12.8 percent, Canada 8.6 percent, Australia 7.8 percent, India 5.4 percent, New Zealand 5.1 percent, Argentina 4.2 percent, Denmark 4.1 percent, and Germany 3.5 percent. Imports of foodstuffs, excluding those from Elre (1943) included wheat, 3,975,000 tons, oilseeds, oils and fats, 2,154,000 tons, meat (including bacon), 1,358,000 tons, sugar, 1,458,000 tons and beverages and other foods 963,000 tons. Lend-lease aid received by the British Empire (1941-45) totaled \$30,753,304,000. Lend-lease exports shipped to the United Kingdom (to Dec. 31, 1945) totaled \$13,879,627,000 but many supplies shipped to other theaters were also for the United Kingdom account.

Overseas Trade

(in millions of dollars)

	1938	1941	1942	1943	1944
Exports	1,895	1,657	1,090	938	1,038
Imports	3,705	4,615*	4,015	4,965	5,265

Re-					
exports	247.5	104.8	18.5	24.6	29.8

*Including munitions.

OVERSEAS TRADE, 1945

(in £000)

Class	Exports	Imports
Total	393,378	1,051,746
Food, drink and tobacco	55,775	460,875
Raw materials	15,021	280,037
Articles wholly or mainly manufactured	301,409	290,819
Animals not for food	740	3,932
Parcel Post	20,433	16,083

COMMUNICATIONS. The merchant marine (July 1, 1939) excluding vessels under 100 tons, totaled 17,964,158 gross tons. Losses during World War II totaled about 10,870,000 tons. On June 30, 1946 412 merchant vessels of 1,764,943 gross tons were under construction in the United Kingdom. Prior to World War II the British merchant marine carried two-fifths of the world's seaborne commerce. Construction during World War II aggregated 6,900,000 gross tons, a total second to the U. S.

Under the Railways Act, 1921, the railways of Great Britain are grouped into four systems—London, Midland and Scottish (6,940 miles), London and North-Eastern (6,380 miles), Great Western (3,793 miles) and Southern (2,185 miles); total, 19,299 miles. In 1943 297.2 million tons of freight were carried; total receipts were £394,360,000. Roads (Mar. 31, 1938): England and Wales (class I) 20,627 miles; (class II) 13,070 miles; Scotland (class I) 6,632 miles; (class II) 3,967 miles; Northern Ireland (class I) 1,273 miles; (class II) 1,933 miles. During 1943 British Overseas Airways planes flew 12,481,485 miles, carrying 65,667 passengers, 1,271 tons of mail and 3,975 tons of freight. In addition, six companies in Great Britain flew 1,572,485 miles, carrying 64,660 passengers and 1,530,696 tons of mail and freight. In 1944 there were 9,609,503 wireless receiving set licenses and in 1939, 3,235,500 telephones. Cars totaled 1,944,394 in 1938.

FINANCE. Revenue (est. 1946-47) £3,161,300,000. Expenditure (est. 1946-47) £3,886,917,000. Revenue (actual 1945-46) £3,284,450,253. Expenditure (actual 1945-46) £5,484,333,461. National debt (March 31, 1945) £22,398,100,000. One of the key points in the Labour party program was the nationalization of the Bank of England which was effected March 1, 1946.

Estimated Revenue and Expenditure, 1946-47

ESTIMATED REVENUE 1946-47

	£	£
Income Tax	1,111,000,000	
Surtax	80,000,000	
Estate Duties	140,000,000	
Stamps	29,000,000	
National Defense Contribution and Excess Profits Tax	325,000,000	
Other Inland Revenue Duties	1,000,000	
Total Inland Revenue		1,686,000,000
Customs	595,000,000	
Excise	592,000,000	
Total Customs and Excise		1,187,000,000
Motor Vehicle Duties		45,000,000
Sale Surplus War Stores		150,000,000
Surplus Receipts from Certain Trading Services		50,000,000
Wireless Licenses		5,300,000
Crown Lands		1,000,000
Receipts from Sundry Loans		15,000,000
Miscellaneous		22,000,000
Total		3,161,300,000

ESTIMATED EXPENDITURE, 1946-47

	£
Interest and Management of National Debt	490,000,000
Payments to N. Ireland Exchequer	20,000,000
National Land Fund	50,000,000
Miscellaneous Consolidated Fund Services	8,000,000
Total	568,000,000
Supply Services	
Defense { Army	675,012,000
Navy	243,371,000
Air	252,380,000
	1,170,763,000
Pensions { Army	6,988,000
Navy	11,704,000
Air	3,120,000
	21,812,000
Civil	
Central Government and Finance	11,277,000
Foreign and Imperial	76,400,000
Home Department, Law and Justice	29,898,000
Education and Broadcasting	138,888,000
Health Housing, Town Planning, Labour and National Insurance	345,575,000
Trade, Industry and Transport	147,382,000
Works Stationery, etc.	83,015,000
Pensions	107,433,000
Contributions to Local Revenues	65,265,000
Supply, Food and Miscellaneous	1,085,616,000
	2,090,749,000
Post Office (excess over revenue)	10,520,000
Tax Collection—Customs and Excise and Internal Revenue votes	25,073,000
	3,318,917,000
Total Expenditure	3,886,917,000

NATURAL FEATURES

GEOGRAPHY. The United Kingdom, consisting of England, Wales, Scotland and Northern Ireland, has an area only about one-third of that of the state of Texas. England in the southeast part of the British Isles is separated from Scotland on the north by the granite Cheviot Hills; from them the Pennine chain of uplands extends south through the center of England, reaching its highest point in the Lake District in the northwest. To the west along the border of Wales—a land of steep hills and valleys—are the Cambrian Mountains while the Cotswolds, a range of hills in Gloucestershire, extend into the surround-

ing shires. The remainder of England is plain land, though not necessarily flat, with the rocky sand-topped moors in the southwest, the rolling downs in the south and southeast and the reclaimed marshes of the low-lying Fens in the east central districts. Scotland is divided into three physical regions—the Highlands, the central lowlands containing two-thirds of the population and the southern Uplands. The western Highland coast is intersected throughout by long narrow sea-lochs or fjords. Scotland also comprises the Outer and Inner Hebrides and other islands off the west coast and the Orkney and Shetland Islands off the north coast. The arms of the sea are so numerous and in several cases penetrate so far inland that few places in Scotland are more than 40 miles from the sea.

HYDROGRAPHY. In addition to the numerous inlets and bays of the coast, England has a group of lakes in the northwest which includes Windermere, Coniston, Derwentwater, Ullswater, and Grasmere. Important rivers flowing into the North Sea are the Thames, Tees, Tyne and the Humber, which is the estuary of the Trent and Ouse Rivers. On the west are the Severn and the Wye, which empty into the Bristol Channel and are navigable, as are the Mersey and Ribbe. The Conway River in northern Wales is also navigable. Scotland has numerous picturesque lochs or lakes. Its most important river is the Clyde.

CLIMATE. England lies in the same latitude as Labrador across the Atlantic to the west and the Baltic countries to the east, but the climate is tempered by the westerly winds which blow from off the warm Gulf Stream. Excessive summer heat is also tempered by the sea-blowing winds. Rainfall is abundant throughout the year varying from over 35 inches in the west to less than 25 inches in the Thames area; during November and March fogs blow in off the sea.

MINERALS. Great Britain's most important mineral resource is coal which was responsible to a large extent for British industrial supremacy during the late 18th and the 19th centuries. Reserves have been variously estimated at from 150,000 million to 200,000 million tons. Exports from the 227,002,000 tons produced in 1938 totaled 49,630,000 tons. The average number of persons employed in coal mining (1943) exclusive of clerks was 707,800.

Most of British iron ore is produced in England especially in Cumberland, Lancashire, and Staffordshire. Tin ore and copper are obtained almost exclusively from Cornwall while lead comes mainly from Flint, Durham, and Derbyshire. Zinc occurs mainly in North Wales, the north of England, the Isle of Man and the county of Dumfries. The whole British supply of

china clay (kaolin)—of great importance in the ceramic, papermaking, bleaching, and chemical industries—comes from Cornwall. Petroleum production is negligible, but oil shale exists in large quantities. In 1938 output of shale was 1,551,000 tons. About 33,000,000 gallons of crude oil and crude naphtha and 25,200 tons of sulphate of ammonia were produced.

MAJOR MINERALS, 1944

Mineral	Metric tons*
Coal	188,400,000
Iron ore	18,660,000†
Tin	25,000
Aluminum	36,000
Zinc (smelter)	60,000†

*Approximate. †1943. ‡1940.

The most important potential sources of water power are in the highlands of Scotland, North Wales and Cumberland. Electricity generated in 1943 amounted to 36,942 million units. Gas manufactured (millions of cubic feet) in 1943 included coal gas 208,434.

FORESTS, FISHERIES. Great Britain was once heavily forested, but centuries of timber cutting and clearing have denuded the country of the original forests. Woodland of all types approximates 3,000,000 acres, and barely 40 percent of Britain's surface is covered with timber. Consequently she is heavily dependent on imported timber. Imports (1939) were valued at £37,128,694.

Great Britain's sea fishing industry is among the most important in the world. The principal kinds of fish caught are herring, cod, haddock, plaice and hake, classed as wet fish, and among shellfish, oysters, crabs and lobsters. The most important factor in the export trade is salted herring which represents about 70 percent of the total (4,381,587 hundredweight valued at £3,870,262 in 1938). Fishing vessels on the register (1938) numbered 11,552 with a net tonnage of 245,404. Britain's canned fish industry is peculiar as Britain imports the great bulk of the canned fish which is consumed and exports most of which is actually canned in Britain—herring. The principal grounds frequented by British fishermen are the North Sea, Iceland, Faroes, south of Ireland, west of Scotland, west of Ireland, Irish Sea and English Channel. The catch in 1938 (excluding shellfish, whales and whale oil) totaled 1,174,811 tons valued at \$78,715,233. The catch of wet fish only (1943) amounted to 345,000 tons.

GIBRALTAR—Status: Colony.

Governor: Lt. Gen. Sir Thomas R. Eastwood.

Gibraltar, at the south end of the Iberian Peninsula, is a rocky promontory commanding the entrance to the Mediter-

anean. Aside from its strategic importance, it is also a free port, naval base and coaling station. It was captured by the Arabs crossing over from Africa into Spain in 711 A. D. In the 15th century it passed to the Moorish ruler of Granada and later became Spanish. It was captured by an Anglo-Dutch force during the War of the Spanish Succession in 1704 and passed to Britain by the Treaty of Utrecht in 1713. Most of the inhabitants are of Spanish, Italian, and Maltese descent. There are no important industries.

MALTA—Status: Colony.

Capital: Valetta (pop. 1931: 22,883).

Governor: Lt. Gen. Sir Edmond C. A. Schreiber.

Foreign trade (1938): exports, \$3,375,000 (17 percent to Britain); imports, \$18,920,000 (27.9 percent from Britain); chief exports, potatoes 16.9 percent, onions 3.7 percent.

Agricultural products: potatoes, onions, cereals, fruits.

The Maltese islands lie between Europe and Africa, in the central channel linking the eastern and western Mediterranean. The inhabited islands are Malta (91 square miles), Gozo (26 square miles), and Comino (1 square mile). The Order of Knights of St. John (Malta), who obtained the islands from Charles V in 1530, reached their highest fame when they withstood an attack by superior Turkish forces in 1565. Napoleon seized the island in 1798, but the French forces were ousted by British troops in 1799, and British rule was confirmed by the treaty of Paris (1814). The principal importance of Malta is its strategic location as a naval base; it was heavily attacked by German and Italian aircraft during World War II. Most of the population are Maltese speaking the Maltese language, a tongue akin to Syriac and Arabic. The islands are densely populated (2202.2 per square mile) and are heavily dependent on imports of food-stuffs, although the soil is fertile and agriculture is a leading industry.

AFRICA

ANGLO-EGYPTIAN SUDAN (See EGYPT).

BRITISH SOUTH AFRICAN PROTECTORATES.

Under this heading are the British protectorates in the south of Africa—Basutoland, Bechuanaland, and Swaziland—which are not part of the Union of South Africa. The territories are administered by a High Commissioner responsible to the Secretary of State for the Dominions in the British cabinet. He also holds the office of High Commissioner for the United Kingdoms in the Union of South Africa. High Commissioner: Sir Evelyn Baring.

BASUTOLAND—Status: Protectorate.
 Capital: Maseru (population 3,000).
 Resident Commissioner: Lt. Col. C. N. Arden Clarke.
 Foreign trade (1942): exports, \$4,163,000; imports, \$1,851,785; chief exports: wool, mohair.
 Agricultural products: corn (1938: 75,680 tons), wheat, sorghum.

Basutoland is a mountainous enclave within the Union of South Africa bounded by the Orange Free State, the Cape Province and Natal. Its altitude varies from 6,000 to 11,000 feet. It was constituted a native state under British protection by a treaty signed with the native chief Moshesh in 1843. It was annexed to Cape Colony in 1871 but on Mar. 13, 1884, was restored to direct control by the Crown. The resident commissioner is advised by a council of 100, 95 of whom are nominated by the native chiefs who administer the affairs of their respective tribes.

The population is restricted almost entirely to the lowland strip in the west; the white population (1,434 in 1936) consists solely of officials, missionaries, traders and a few labor agents for employees in the Union. About 100,000 natives are regularly employed in the Union. Sheep raising is highly developed; in 1940 there were 1,597,887 sheep and, exports of wool in 1943 were about 3,600 tons. Land is the common property of the nation held in trust by the chiefs. There are no European farmers. Trade, carried on by licensed traders, is confined to the exchange of native products for native requirements such as clothing, ploughs and tinware.

BECHUANALAND—Status: Protectorate.
 Capital: Mafeking, in Cape Province.
 Resident Commissioner: A. D. Forsyth Thompson.
 Foreign trade (1942): exports, \$1,657,100; imports, \$2,100,800; chief export, gold.
 Agricultural products: hides and skins, cattle, butter, millet and maize.
 Mineral: Gold (1940: 18,015 ounces).

Bechuanaland lies in south central Africa, bounded on the south and south-east by the Union of South Africa, on the west by South-West Africa, on the north by Angola, and on the northeast by Southern Rhodesia. Its average elevation is 3,300 feet and the greater part is gently undulating. The area was placed under British protection on Sept. 30, 1885 to prevent further Boer encroachment and has since remained a British protectorate. The form of government is similar to that of Basutoland. The territory is administered from Mafeking, across the southern frontier in Cape Province.

Most of the inhabitants are Bantu, but there were 1,899 Europeans in 1936, a few of whom are farmers. The country is essentially pastoral with cattle raising and

dairy farming the chief industries. Some gold is mined in the Tati district near Francistown. Silver and copper also are mined.

Timber for use as fuel and pit props is also produced. Wild animals are numerous, and considerable trapping for skins is carried on. Railway mileage is 386 and highways, 2,048.

GAMBIA—Status: Colony and protectorate.
 Capital: Bathurst (population 1931: 14,370).
 Governor: Sir Hilary P. R. Blood.
 Foreign trade (1943): exports, \$828,600; imports, \$5,004,500; chief exports, groundnuts (over 70 percent).
 Agricultural products: groundnuts, hides and skins, millet, rice, palm kernels.

Gambia, the smallest of the British West African dependencies, is a stretch of land 200 miles long on both sides of the lower Gambia River, surrounded on all land sides by French West Africa. During the 17th century it was settled by various companies of English merchants, but the slave trade was its chief financial support until abolition of slavery in 1807. Trade on the river was assigned to England in 1783 by the Treaty of Versailles and Gambia became a crown colony in 1843. Except for the island of St. Mary on which the capital stands, the whole area is administered as a protectorate.

The inhabitants, mostly Negroes or negroids, are predominantly Mohammedan. The principal economic activity is the cultivation of groundnuts. Internal transportation is by steamer and launch.

GOLD COAST—Status: Colonies (Gold Coast, 23,937 square miles; Ashanti, 24,379 square miles), protectorate (Northern Territories, 30,486 square miles) and mandate (Togoland, 13,041 square miles).

Capital: Accra (population 1937: 72,977).
 Governor: Sir Alan Burns.
 Foreign trade (1942): exports, \$49,166,000; imports, \$34,658,000; chief exports, gold, cacao.
 Agricultural products: Cacao (1942: 231,770 tons), copra, palm kernels.
 Minerals: gold, 1,181,333 ounces (1941); manganese, 565,000 tons (1944); silver.

Early a center of the slaving trade and of Anglo-Dutch rivalry, the Gold Coast, stretching along the Gulf of Guinea for 334 miles became a British possession in 1870. Ashanti in the interior became a protectorate in 1896 and was annexed in 1901. The Northern Territories to the north of Ashanti became a protectorate in 1901. The area is administered by a governor with an Executive Council and a Legislative Council with some elected members. Ashanti and the Northern Territories are administered by Chief Commissioners responsible to the governor.

The natives are all Negroes. There are about 3,100 non-Africans. The principal

native industry is the cultivation of cacao in the production of which the colony leads the world. In 1939 there were 500 miles of railway, and 6,337 miles of highway.

KENYA—Status: Colony and protectorate.

Capital: Nairobi (population 65,000).

Governor: Sir P. E. Mitchell.

Foreign trade (1943): exports, \$17,020,000; imports, \$44,490,000; chief exports, coffee, tea.

Agricultural products: coffee, 19,841 tons (1939), tea, pyrethrum, sugar cane, sisal, corn, cotton, hides and skins.

Minerals: Gold, 77,444 ounces (1939), sodium carbonate, silver, salt.

Forest products: wattle bark and extract, timber.

Kenya Colony and Protectorate extends along the Indian Ocean between Ethiopia and Tanganyika and westward to Lake Victoria and Uganda. Formerly known as the East Africa Protectorate, it was held under a concession from the Sultan of Zanzibar by the Imperial British East Africa Company from 1887 to 1905. It became a crown colony in 1920, the coastal strip leased from the sultan of Zanzibar becoming a protectorate.

The colony is predominantly agricultural and a large area is cultivated by Europeans. The country ranges in altitude from sea level to over 9,000 ft.; hence, the cultivation of tropical, subtropical and temperate crops is possible. Non-natives (1943) included 30,765 Europeans, 17,640 Arabs and 55,795 Asiatics (mostly British Indians). Railway mileage in 1938 was 1,500, and highway mileage, 11,435.

MAURITIUS—Status: Colony.

Capital: Port Louis (population 60,000).

Governor: Sir Henry MacKenzie-Kennedy.

Foreign trade (1942): exports, \$13,030,000; imports, \$11,560,000; chief export, sugar.

Agricultural products: sugar, 354,246 tons (1940), copra, tobacco.

Mauritius is a mountainous island of volcanic origin in the Indian Ocean, about 50 miles east of Madagascar. It was seized in 1810 from the French who had settled it in 1715 and was formally ceded to Great Britain by the Treaty of Paris (1814). The governor is assisted by an Executive Council and a Council of Government of 27 members, ten of whom are elected.

With almost 600 persons per square mile the island is one of the most densely populated regions in the world. The population has a large white element, chiefly French and British, but British Indians are predominant (268,649 in 1931). There are many half-castes. The leading industry is sugar cultivation. Railway mileage is 154 and highways, 700.

NIGERIA—Status: Colony and protectorate.

Area: 372,674 square miles (including Cameroons mandate).

Population (est. 1943): 21,329,328.

Density per square mile: 57.2.

Governor: Sir Arthur Frederick Richards.

Principal cities (est. 1939): Ibadan, 318,320 (native metropolis); Lagos, 167,000 (capital); Kano, 80,634 (textiles, leather goods, cattle).

Monetary unit: British pound.

Racial stock: Native, except about .01% European.

Languages: Native tongues, Arabic, English.

Religions: Mohammedan, Pagan, Christian.

Nigeria, an area twice the size of California, situated on the west African coast on the Gulf of Guinea, was visited by European traders and explorers in the 16th century. By the end of the 18th century, British operators had a virtual monopoly in the area. Between 1879 and 1914, a series of private colonial developments by the British and also re-organizations of the Crown's interest in the region resulted in the formation of Nigeria as it exists today. During World War I, native troops of the West African Frontier Force joined with French soldiers to defeat the German garrison in the Cameroons. After the war, the Treaty of Versailles made a mandate of the Cameroons, which is a narrow strip along Nigeria's eastern border. Today the Cameroons is attached to Nigeria for administrative purposes.

The governor of Nigeria, named by the British Crown, heads the administration of the colony which divides into four sections, each composed of several provinces. A chief commissioner responsible to the governor oversees each group of provinces. The custom of rule by native regimes, advised by British residents, is effected locally wherever practicable.

About 415,000 of the estimated 3,000,000 Nigerian children between seven and fourteen attend primary schools. Perhaps 6,000 attend secondary schools. The Yaba Higher College has sixty-five students. The vast majority of the population is Negro, although in the north the blood is somewhat mixed as a result of invasions by the Fula, Berber and Arab or Arabized people. Islam is the dominant religion but Christian missionary societies are active throughout the country.

Most of the people are agriculturists. The staple food crops are guinea-corn, millet, yams, bananas and maize. In 1940, the principal export crops were, in short tons: palm kernels, 235,521; palm oils, 132,723; cacao, 89,737; groundnuts, 169,486; and cotton and bananas. Livestock estimates in 1938 were 5,075,400 goats, 2,990,700 cattle and 1,886,800 sheep. Hides and skins are a big export item. Aside from small native industry, there is no manufacturing.

Most external trade is with Britain. Exports in 1940 totaled £13,052,916. There is a substantial internal trade, of which Kano is a busy center as a terminal for caravan routes. Imports in 1940 were £10,822,261, including cotton textiles, iron and steel goods, and tobacco products.

The Niger and several other rivers are navigable; otherwise, the 2,341 miles of railway (in 1939) are the chief transport means. Highway mileage totals 21,277. The main ports, except for Lagos, all are on rivers.

Nigeria has a 500-mile ocean frontage. Extending from twenty to sixty miles inland is the swampy Niger delta region, gradually giving way to hilly forest land. The larger part of the colony belongs to the great African plateau which, in Nigeria, reaches a maximum height of 3,000 feet. All of Nigeria lies within the tropics but the climate varies. The southern part is typically tropical, with rainfall up to 140 inches a year, but in some parts of the plateau, near-temperate conditions prevail.

Nigeria is a leading tin producer—13,800 tons in 1944—from mines on the Bauchi plateau. Other major minerals are coal, gold, lead, silver and tungsten.

Over half the area is forested but forest resources are comparatively unexploited. Mahogany—602,629 cubic feet in 1938—is the main timber export, followed by cedar and walnut. In 1940 a total of 683 tons of gum arabic, obtained from the northern provinces, was exported.

NORTHERN RHODESIA—Status: Colony.

Capital: Lusaka (population 1931: 2,396).

Governor: Sir John Waddington.

Foreign trade (1943): exports, \$51,372,000; imports, \$22,498,900; chief export, copper (about 75 percent).

Agricultural products: tobacco, maize, wheat.

Minerals: copper, 248,000 tons (1944), cobalt alloy, 2,473 tons (1942), vanadic oxide, 750.2 tons (1942), zinc.

Northern Rhodesia is in central Africa, bounded on the north by the Belgian Congo, Lake Tanganyika and Tanganyika Territory, on the east and southeast by Nyasaland and Mozambique, on the south-east and south by Southern Rhodesia and on the west by Angola. Much of the country consists of high plateau, with the Congo-Zambesi watershed rising in places to 5,000 feet. Rhodesia was assigned in 1889 to the British South Africa Company headed by Cecil Rhodes. Administrative control was transferred to the Crown on Apr. 1, 1924.

Native tribes number from 50 to 60; there were 18,745 Europeans in 1944. Over 3,000,000 acres are owned and occupied by Europeans. Metals constitute almost all exports by value. Lead and zinc deposits occur at

Broken Hill; copper, at Bwana M'Kuba. Railroad mileage in 1942 totaled 629; arterial roads, 3,158. A number of rivers are navigable.

NYASALAND—Status: Protectorate.

Capital: Blantyre (population 6,000).

Governor: Sir E. C. Richards.

Foreign trade (1945): exports, \$7,388,085; imports, \$6,621,435; chief export, tobacco (about 45 percent).

Agricultural products: tobacco (exports 1945: 8,836 tons), tea (6,859 tons), cotton (1,801 tons).

Nyasaland, a British protectorate since 1891, is a narrow area lying between Mozambique and Northern Rhodesia along the southern and western shores of Lake Nyasa.

Agriculture is the chief occupation, both of the European settlers and natives. In 1940 there were 2,177 Asiatics and 1,812 Europeans. Railway mileage in 1939 totaled 289 and highways 1,852. Lake Nyasa has a steamer service.

ST. HELENA—Status: Colony.

Capital: Jamestown (population 1931: 1,381).

Governor: Major W. B. Gray.

Foreign trade (1942): exports, \$126,500; imports, \$313,130; chief exports, flax fiber and tow.

Agricultural products: flax, potatoes.

St. Helena is a volcanic island (47 square miles) in the S. Atlantic about 1,200 miles from the west coast of Africa. It is famous as the place of exile of Napoleon (1815–1821). It was taken for Britain in 1651 by the English East India Company and became a Crown Colony in 1833. Attached to it are Ascension Island (34 square miles), 700 miles N. W., and the Tristan da Cunha group. Most of the inhabitants are of mixed European, East Indian and African descent.

SEYCHELLES—Status: Colony.

Capital: Victoria (population 5,000).

Governor: Sir W. M. Logan.

Foreign trade (1940): exports, \$356,000; imports, \$329,000; chief export, copra.

Agricultural products: cinnamon, coconuts, maize, sugar cane.

This archipelago of about 92 islands in the Indian Ocean was seized from France by British troops in 1794 and ceded to Great Britain by the Treaty of Paris in 1814. The principal island is Mahé (55 square miles), about 600 miles N.E. of Madagascar.

SIERRA LEONE—Status: Colony and Protectorate.

Capital: Freetown (population 1944: 86,000).

Governor: Major Sir H. C. Stevenson.

Foreign trade (1941): exports, \$6,419,800; imports, \$15,370,400; chief exports, diamonds, iron ore.

Agricultural products: palm kernels and oil, rice, millet, cassava.

Minerals: diamonds (est. 1944: 850,000 carats), iron ore (1938: 965,390 tons), gold.

Forest products: palm kernels, piassava.

Sierra Leone lies on Africa's west coast between French Guinea and Liberia. It has a well-watered northern hilly country but a low swampy coast with an extremely unhealthy climate. The coastal area (colony proper) was ceded to English settlers in 1788 as a home for Negroes discharged from the British armed forces and also for runaway slaves who had found asylum in London. The British protectorate over the hinterland was proclaimed in 1896.

Many of the natives are Mohammedans; Europeans in 1931 numbered 651. Most cultivation is carried on by natives. In 1940 there were 311 miles of railway and 836 miles of road. The harbor of Freetown is the best on Africa's west coast.

SOMALILAND PROTECTORATE—Status: Protectorate.

Capital: Berbera (population 20,000).

Military Governor: Brig. G. T. Fisher.

Foreign trade (1941-42): exports, \$770,000; imports, \$2,565,000; chief export, hides and skins.

Agricultural products: cattle, hides and skins, grains.

Forest products: gums and resins.

The protectorate extends along the Gulf of Aden for about 400 miles and inland for from 80 to 220 miles. The interior is an elevated plateau falling in steep escarpments to the coastal plain. It came under Egyptian influence in 1875 but during the period 1884-86 treaties guaranteeing British protection were signed with the various Somali chiefs. Italian troops occupied the protectorate in 1940 but it was quickly retaken by Imperial troops in 1941. Both executive and legislative power is exercised by the military governor.

There were 2,700 non-natives in 1938. Most of the inhabitants are nomadic Somalis of Mohammedan faith. Their principal activity is stock raising. Domestic animals in 1939 included 3,000,000 sheep, 2,000,000 goats and 1,000,000 camels.

SOUTHERN RHODESIA—Status: Self-governing colony.

Capital: Salisbury (population 1941: 51,760).

Governor: Vice Admiral Sir Campbell Tait.

Prime Minister: Sir Godfrey M. Huggins.

Foreign trade (1940): exports, \$61,000,000; imports, \$38,450,000; chief exports, gold (46.1 percent), tobacco, asbestos.

Agricultural products: tobacco (1943: 16,880 tons), corn, groundnuts.

Minerals: gold (1944: 593,000 ounces), asbestos (1943: 56,382 tons), coal, chrome ore, silver.

Southern Rhodesia is between Northern Rhodesia and the Union of South Africa in

south central Africa, and is part of the great South African plateau. Its northern boundary is the Zambesi River. About two-thirds of the country is covered by trees and shrubs. The country was settled in 1890 by the British South Africa Company led by Cecil Rhodes who, two years before, had obtained a mineral concession from the Matebele chief, Lobengula. With the expiration of the company's renewed charter, the white residents voted in favor of a responsible government of their own in 1922, and on Sept. 12, 1923 the country was annexed to Britain.

Most of the inhabitants are natives, but the country is well-adapted to European settlers who in 1941 numbered 68,954. In addition there were 6,521 Asiatics and half-castes. Farming exists in several forms, from ranching to tobacco growing, but mixed farming is becoming more common. Conditions for cattle raising and dairy farming are especially favorable. In 1942 there were 2,647,154 cattle. Manufacturing is of growing importance with the 44,777 factory workers producing goods valued at \$23,832,240 in 1942. The colony is well served with railways (2,709 mi.) and roads (about 9,000 mi.) as well as airlines.

SOUTH-WEST AFRICA

(See UNION OF SOUTH AFRICA).

SWAZILAND—Status: Protectorate.

Capital: Mbabane (population 1,600).

Resident Commissioner: E. K. Featherstone.

Foreign trade: (included in South African customs union; chief export, live cattle).

Agricultural products: cattle, hides and skins, butter, tobacco, corn, millet.

Minerals: Tin (cassiterite) (1940: 165 tons), asbestos, gold.

Forest product: Wattle bark.

Swaziland lies in the southeastern corner of the Transvaal. It is largely hilly with an average elevation of 4,000 feet in the west. It came under the protection of the Transvaal Republic in 1894, but was made a British protectorate in 1906. The paramount native chief and other chiefs exercise jurisdiction in civil cases affecting natives only.

The natives are mostly Swazi; there were 2,740 Europeans in 1936, most of whom were farmers. Grazing is the principal native occupation. There is excellent pasture in the high land to the west. Tropical and subtropical crops are raised in the lower areas. Tin is mined near Mbabane. The country is dependent on road transportation, by motor, oxen or mule.

TANGANYIKA TERRITORY—Status: League of Nations Mandate.

Capital: Dar-es-Salaam (population 74,036).

Governor: Sir W. D. Battershill.

Foreign trade (1944): exports, £13,463,682; imports, £5,639,381; chief export, sisal.

Agricultural products: Sisal (1943 exports: 9,550 tons), coffee, cotton, groundnuts, tobacco.

Minerals: Gold (1939: 150,000 ounces), tin, mica.

Forest products: Gum arabic and copal, beeswax, timber.

Tanganyika, with Ruanda and Urundi, constituted German East Africa from 1884 until 1919. Since 1919 it has been administered under League of Nations mandate by Britain. It has a coast line of about 500 mi. The narrow coastal plain is bordered on the west by the precipitous eastern side of the central African plateau. The territory also includes adjacent islands.

The Territory is sparsely populated; about two-thirds of the total area is uninhabited. In 1942 there were 14,383 Europeans and 35,591 Asiatics. It is the world's largest producer of sisal hemp. Most of the hemp, which is of the highest grade, is grown in the drier parts of the coast belt under European supervision. Stock raising is also important but its progress is hampered by the presence of large tsetse fly areas. Cattle in 1942 numbered 5,887,826. Railway mileage in 1939 totaled 1,377 and roads, 2,027. Belgian and British steamer services operate on Lake Tanganyika, whose eastern shores are in the Territory.

UGANDA—Status: Protectorate.

Capital: Entebbe (population 7,321).

Governor: Sir John Hall.

Foreign trade: (1943) exports, \$22,730,000; imports, \$10,600,000; chief exports, cotton, tea.

Agricultural products: cotton (1943 exports: 563 tons), coffee (22,037 tons), sugar cane, rubber, tea, sisal.

Minerals: gold, tin.

Uganda lies in eastern equatorial Africa southwest of Lake Victoria. The surface is extremely diversified, with lofty plateaus, snow-capped peaks, swamps, forests, and fertile areas. A British protectorate over the area was proclaimed in 1894. A large measure of home rule is given the native states, notably Buganda, whose *kabaka* (king) is represented by a ministry and native parliament.

Agriculture, including livestock, is the basis of the economy. Cotton is raised, principally by natives, but coffee, tea and rubber are grown on large plantations. The natives possess large herds of cattle and sheep. A well-developed road system extended 7,476 miles in 1945 and railroads totaled 328 miles. In 1943 there were 72 Asiatics and 2,647 Europeans in the protectorate.

Union of South Africa (Dominion)

Area: 472,550 square miles.

Population (est. 1944): 11,068,000.

Density per square mile: 23.3.

Governor General: Gideon Brand Van Zyl.

Prime Minister: Field Marshal Jan C. Smuts.

Principal cities (census 1936): Johannesburg, 519,384 (gold, industrial center); Capetown, 344,223 (seat of legislature, seaport); Durban, 259,606 (seaport); Pretoria, 128,621 (seat of administration); Port Elizabeth, 109,841 (seaport).

Monetary unit: South African pound (£ SA).

Racial stock (1941): European, 20.7%; Bantu, 68.9%; Colored (i.e. mixed), 8%; Asiatic, 2.3%.

Languages: English, Afrikaans.

Religions (European population): Dutch Reformed Churches, 54.29%; Anglican Church, 17.22%; Methodist, 7.08%; Roman Catholic, 4.61%; Jewish, 4.52%; Others, 7.21%.

The Union of South Africa, at the southern tip of the continent, is about three times the size of California and is the richest gold and diamond producing state in the world.

After the discovery of the Cape of Good Hope in 1488 by Bartholomew Diaz, the Dutch sent the first colonists to the area in 1652. The British seized the colony in 1814. In protest against their autocratic rule, thousands of Boers, settlers of Dutch descent, trekked northward between 1835 and 1838 and set up the republics of Orange Free State and Transvaal, which were subsequently recognized by the British.

The discovery of gold in the Transvaal in 1886 brought an influx of English and other foreigners. British demands that these immigrants be enfranchised by the Transvaal government precipitated the South African War of 1898-1902, won by the British, and the Treaty of Vereeniging, on May 31, 1902, made the Boers renounce the independence of Transvaal and Orange Free State. In 1910, Cape Colony, Transvaal, Natal and the Orange Free State were set up as the Union of South Africa, with dominion status and with Louis Botha, a former Boer general, as the first premier. During World War I South African forces seized German South-West Africa, over which they later received a mandate by the Treaty of Versailles.

When World War II broke, there was considerable pro-German and anti-British sympathy in South Africa. The country went to war against the Axis, however, under the leadership of Smuts, and South African forces fought in many theaters.

The Union of South Africa, as a self-governing dominion, has its own legislature, a Senate of forty-four members elected for ten years, and a House of Assembly of 153 members elected for five years. All legislators must be Union nationals of European descent, and suffrage

is virtually limited to whites. The governor general, appointed by the English Crown after consultation with the Union, can summon or dissolve the Senate and House, but a general election must be held at least once every five years.

The elected councils in each of the four provinces have only such powers as are delegated to them. Each is headed by an administrator appointed by the central government.

Political considerations made the draft inexpedient in World War II, and all members of the armed forces were volunteers. In May of 1945, South Africa had 80,000 men serving overseas. In 1944, the armed forces included 160,000 men of European descent, and 100,000 others recruited for non-combat service. Union troops fought in Ethiopia, Libya, North Africa and Italy. The navy, only slightly expanded in World War II, has about sixty small vessels.

Education for white children is compulsory from the ages of seven to sixteen. Primary education is free and, except for vocational schools and the five universities, all education is under provincial control.

In 1941 there were 3,622 state and state-aided primary and secondary schools for European scholars who numbered 388,925, and 5,229 non-European schools with 678,161 scholars. The average number of university students was 11,801.

The official languages are English and Afrikaans. The latter, derived from 17th-century Dutch, is taught in almost all the schools. About 65 percent of the population over 7 years old understand both languages. People speaking Afrikaans as a "home" language predominate in all the provinces except Natal where most of the Asiatic population, chiefly laborers from South India, is concentrated. European and Asiatic immigration is strictly controlled.

Climate and differences in terrain combine to give a great variety of agricultural products. The staple crop is maize, grown widely with a production varying from 1½ to 3 million tons annually. In southwest Cape province, the products of the Mediterranean type predominate while in the coastal belt of Natal and in the northern Transvaal subtropical crops, especially sugar, are grown.

MAJOR AGRICULTURAL CROPS, 1939

Crop	Acres	Tons
Maize	6,214,543	2,901,968
Kafir-corn	273,382	184,612
Oats	579,963	117,663
Rye	122,029	23,561
Sugar cane	154,664	4,232,876
Wheat	1,853,711	521,648

The average annual wine production runs to about 32,500,000 gallons. Stock

raising is important in the high veldt but is curbed by animal disease in the low veldt. In 1939 there were 12,059,530 cattle, 32,055,640 woolled sheep and 6,350,106 other sheep, 6,140,116 goats, 777,590 horses and 863,119 asses. Wool production in 1940 was 137,988 tons. Ostrich farming, once important, has declined as a result of fashion changes; there were 40,265 birds in 1939.

In 1942, a total of 9,989 factories had 412,492 workers and a gross output valued at £272,875,859. Food, beverages, and tobacco and metal products led the list. As a result of the need in World War II, the Union's manufacturing now is no longer mainly devoted to agricultural processing. A wartime iron and steel industry was established and cement, chemical, textile and auto assembly plants were expanded.

Exports in 1940, excluding specie and gold bullion, came to £34,090,627, of which 40 percent went to Britain, 14 percent to the British Empire and 9 percent to the United States. Sugar, coal, corn, hides and skin, diamonds and citrus fruits led the exports. Imports totaled £105,009,934, of which 37 percent came from Britain, 24 percent from the United States and 18 percent from the British Empire. Among them were foodstuffs, cotton piece goods, electrical machinery, textiles, oil and vehicles.

The well-organized railway system mostly Union-controlled, totaled 13,251 miles in 1944. The chief ports are Durban, Capetown, Port Elizabeth and East London. Overseas shipping in 1940 totaled 12,909,734 tons net and coastwise shipping, 12,316,308 tons net. Roads suitable for motor traffic in 1938 amounted to 87,495 miles. Regular air service is available to Europe via Cairo and to the United States via West Africa and Brazil. Telephones in 1941 numbered 235,686; automobiles, 317,958 and radio sets (1944), 365,250.

Expenditures in 1946-47 were estimated at £ SA 120,510,150 and revenues at about £ SA 120,415,000 after proposed tax reductions. The public debt on Mar. 31, 1946, totaled £ SA 582,924,000. The only bank of issue is the South African Reserve Bank. Notes in circulation on Mar. 31, 1945 totaled £ SA 51,000,000; gold reserve £ SA 103,000,000; sterling balance in London £27,000,000.

The Union has a high interior plateau, or veldt, nearly half of which averages 4,000 feet in elevation. There are no important mountain ranges, although the Great Escarpment, separating the veldt from the coastal plain, rises in the Natal-Basutoland to over 10,000 feet. The principal river is the Orange, rising in Basutoland, flowing westward for 1,300 miles through the Union's center to the Atlantic.

Except for the western semi-arid regions the climate is generally subtropical, much

ke that of northern Florida. Rainfall averages about 40 inches a year on the east coast and decreases sharply westward.

The Union is the world's leading gold producer, mined from deposits in Witwatersrand and the Transvaal. The 1940 gold output was £1,874,593,973. Diamond production, in the Kimberly district on the Cape Orange-Free State border, is now surpassed in importance by coal. Mineral production for 1943 included: asbestos, 1,661 tons; coal, 22,660,000 tons; iron ore, 1,932 tons; manganese ore, 219,122 tons; platinum, 40,654 ounces; and silver, 1,334,422 fine ounces. Output for 1944 included: copper, 24,800 tons; gold, 12,227,228 ounces; 4 diamonds, 698,525 carats. Chrome, pyrite, lead, tin and tungsten also are mined.

Forests cover only a small portion of the Union, and are mostly in the east. The maling industry, centered at Durban on the east coast, produced 2,472,909 gallons of whale oil in 1939. The fish catch of 1,180 tons was valued at \$2,371,759.

SOUTH-WEST AFRICA. *Status:* Mandate. *Area:* 317,725 square miles. *Population* (est. 1941): 321,000. *Capital:* Windhoek (pop. 1936: 10,651). *Administrator:* Col. P. Hoogenhout. *Foreign trade* (1943): exports, £6,639,618; imports, £3,315,966; chief exports, karakul skins, butter, slaughter animals, diamonds. *Agricultural products:* hides and skins, butter, corn, wheat. *Minerals* (1944): diamonds, 154,000 carats; radium, 424,000 tons; tungsten, 100 tons; lead, tin, iron ore and copper.

The area, bounded on the north by Angola, and on the east by Bechuanaland Protectorate and the Union of South Africa, was discovered by the Portuguese explorer Diaz in the late 15th century. It was for the most part a portion of the high plateau of South Africa with a general elevation of from 3,000 to 4,000 feet. It became a German colony in 1884 but was conquered by South African forces in 1915, coming a union mandate by the terms of the Treaty of Versailles. Most of the German nationals accepted an offer of British naturalization in 1923, but following the closure in 1939 of a strong Nazi organization in the mandate, most of the naturalized Germans were returned to their previous German status. The administrator is appointed by the Union Government. There is a legislative council, locally nominated and partly elected by European males of British nationality.

The country in general is better suited to grazing than for the raising of crops because of light rainfall. The karakul sheep industry is particularly well-developed; in 1943 2,327,653 pelts were exported. The Union accounts for almost all imports and about 40 percent of the exports. In 1936 there were 30,677 Euro-

peans (9,634 German-speaking) and 65,373 half-castes in the mandate. Most of the natives live on large reserves. The principal port is Walvis Bay. Railways in 1938 totaled 1,493 miles.

ZANZIBAR—Status: Protectorate.

Capital: Zanzibar (population 1931: 45,276).

Sultan: Seyyid Sir Khalifa bin Harub.

British Resident: Maj. E. A. T. Durrone.

Foreign trade (1943): exports, \$4,570,000; imports, \$4,360,000; chief export, cloves.

Agricultural products: cloves (1939: 14,769 tons), copra, sisal.

The protectorate consists principally of the islands of Zanzibar (640 square miles) and Pemba (380 square miles), just off the east African coast. Before 1890, the sultanate's territory also included a large area on the mainland, now comprising Italian Somaliland, Kenya and Tanganyika. It was proclaimed a British protectorate Nov. 4, 1890. The British resident administers the government, but the sultan still retains considerable authority. There is an Executive Council headed by the sultan and a nominated Legislative Council.

The principal industry is the production of cloves; Zanzibar produces 80 percent of the world supply.

WESTERN HEMISPHERE

BAHAMAS—Status: Colony.

Capital: Nassau (population 1943: 29,391).

Governor: W. L. Murphy.

Foreign trade (1944): exports, £337,047; imports, £1,735,899; chief exports, tomatoes, straw hats.

Agricultural products: tomatoes, citrus fruit, sisal.

Sea products: sponges, lobsters.

The Bahamas are an archipelago of about 3,000 islets, cays and rocks, east of Florida and north of Cuba, extending from N.W. to S.E. for about 800 miles. Only about 20 of the islands are inhabited; the most important is New Providence (20 square miles) on which Nassau is located. The islands were reached by Columbus in Aug. 1492 and were a favorite pirate resort in the early 18th century. They have been a Crown colony since 1717. The constitution provides for a nominated legislative council and a popularly elected assembly. The governor is advised by an Executive Council.

About 85 percent of the population is Negro. The tourist trade is of considerable importance, especially at Nassau which is a favorite winter resort. Agriculture, except for tomato and sisal culture, is of little importance. Straw and shellwork are the principal industries of the natives. A Royal Air Force unit is stationed in the archipelago.

BARBADOS—Status: Colony.**Capital:** Bridgetown (population 15,000).**Governor:** Sir H. Gratton Bush.**Foreign trade (1943):** exports, £2,338,539; imports, £2,888,349; chief export, sugar.**Agricultural products:** sugar (1943: 133,273 tons), cotton.**Manufactures:** rum (1943: 4,363,548 wine gallons).

Barbados, an island east of the Windward group in the West Indies, has been a British possession since 1627. The colony has a nominated Legislative Council and a popularly elected Assembly of 24 members, but the Crown, represented by the governor, retains the veto power.

The island is very densely populated (about 1,200 per square miles). About 70 percent of the inhabitants are Negro, 7 percent white and the remainder of mixed blood. About 70 percent of the total area is cultivated and half of this is devoted to sugar which is the staple product; there are 100 sugar and molasses plants and 3 rum distilleries. Fishing is an important seasonal industry. Mineral production is limited to small amounts of asphalt and petroleum.

BERMUDA—Status: Colony.**Capital:** Hamilton (population 1939: 1,863).**Governor:** Admiral Sir Ralph Leatham.**Foreign trade:** exports (1940), \$320,000; imports (1943), \$10,417,000; chief export, lily bulbs.**Agricultural products:** lily bulbs, potatoes, vegetables, arrowroot.

Bermuda is an archipelago of about 360 small islands 580 miles east of North Carolina. Discovered by Juan Bermudez, a shipwrecked Spaniard, early in the 16th century, the islands were settled in 1612 by an offshoot of the Virginia Company and became a Crown colony in 1684. The governor is assisted by nominated Executive and Legislative Councils and a popularly elected Assembly of 36 members. In 1940 sites on the islands were leased for 99 years to the U. S. as air and navy bases. Bermuda is also the headquarters of the West Indies and Atlantic squadron of the Royal Navy. The most important factor in the colony's economy is the tourist trade. Most supplies must be imported.

BRITISH GUIANA—Status: Colony.**Capital:** Georgetown (population 1943: 73,171).**Governor:** Sir Gordon James Lethem.**Foreign trade (1943):** exports, \$19,489,288; imports, \$20,732,500; chief exports, sugar, bauxite, gold.**Agricultural products:** sugar (1943: 131,186 long tons), rice, copra, coffee.**Minerals:** bauxite (1944: 1,023,100 tons), gold (1940: 35,745 ounces), diamonds.**Forest products:** balata, timber.

Located on the northeastern coast of South America between Venezuela and Su-

rinam, British Guiana was settled by the Dutch in the mid-17th century. It was occupied by the British in 1796 and ceded to them at the end of the Napoleonic Wars. Behind the low plain which contains the agricultural area is a somewhat higher area containing forest and mineral resources. The governor is assisted by an Executive Council; the Legislative Council has an elected majority.

The heterogeneous population contains about 143,000 East Indians, 131,000 Negroes, 9,000 Portuguese, 2,000 other Europeans, 42,000 of mixed blood, 3,600 Chinese and 9,000 aborigines. The cultivated area covers only 155,000 acres, mostly devoted to rice and sugar cane. About 86 percent of the colony is forested, but the vast forest resources are relatively unexploited. Railway mileage is 110, and highway, 677, but communication to the interior is mainly by steamer and launch. The colony is second only to the U. S. in bauxite production.

BRITISH HONDURAS—Status: Colony.**Capital:** Belize (population 1931: 16,687).**Governor:** Sir John A. Hunter.**Foreign trade (1942):** exports, \$1,252,000; imports, \$3,964,000; chief exports, cedar and mahogany.**Agricultural products:** bananas, sugar cane, citrus fruits.**Forest products (1938):** cedar logs (414,000 board feet) and lumber (10,000 board feet), mahogany logs (814,219 cubic feet) and lumber (228,060 cubic feet); chicle (450 tons).

This Caribbean colony is bounded on the north by Yucatan and on the west by Guatemala. It was settled in 1662 by woodcutters from Jamaica. An irregular form of local government continued until 1871 when it became a Crown colony. The governor is assisted by an Executive Council and a partly elected Legislative Council.

The colony's economy is dependent upon timber and other forest exports. Agriculture has never been adequately developed. There are no railways and road development is backward. The majority of the population are mestizos of Negro, native Indian, and white descent. Whites number less than 2,500.

Canada (British Dominion)**Area:** 3,466,556 square miles.**Population (census 1941):** 11,506,655.**Density per square mile:** 3.3.**Governor General:** Field Marshal Viscount Alexander of Tunis.**Prime Minister:** W. L. Mackenzie King.

Principal cities (census 1941): Montreal, 903,007 (seaport); Toronto, 667,457 (manufacturing center); Vancouver, 275,353 (Pacific seaport); Winnipeg, 221,960 (grain); Hamilton (Ontario) 166,337 (iron and steel); Ottawa, 154,951 (capital); Quebec, 150,757 (seaport); Windsor, 105,311 (automobiles).

Monetary unit: Canadian dollar.

Racial stock (census 1941): British, 50%; French, 27%; German, 4% Ukrainian, 2%; Others, 17%.

Languages: English, French.

Religions (census 1941): Roman Catholic, 62%; United Church, 19%; Anglican, 15%; Presbyterian, 8%; Baptist, 4%; Others, 12%.

HISTORY. The Norse explorer Leif Ericsson probably reached the shores of Canada about 1000 A. D., but the history of the white man in the country actually began in 1497, when John Cabot, an Italian in the service of Henry VII of England, reached the shore of Newfoundland or Nova Scotia. Canada was taken for France in 1534 by Jacques Cartier. The actual settlement of New France, as it was then called, began in 1603 at Port Royal in what is now Nova Scotia, and 1608 Quebec was founded. French colonization efforts were not very successful, but French explorers by the end of the 17th century had penetrated beyond the Great Lakes to the western prairies and south along the Mississippi to the Gulf of Mexico. Meanwhile, in the North, the English Hudson's Bay Company had planted itself on Hudson Bay in 1670. Because of the valuable fisheries and fur trade, a conflict developed between the French and English; in 1713 Newfoundland and Acadia were lost to England and in 1763 Canada came under English control.

At this time the population of Canada was almost entirely French, but in the next few decades thousands of British colonists emigrated to Canada from the

British Isles and from the American Colonies. Partly to placate the French who were concentrated in Quebec, Canada was divided into Upper (British) and Lower (French) Canada in 1791. In 1840 the two provinces again were joined under one government and in 1849 Canada was given the right of self-government. By the British North America Act of 1867 the Dominion of Canada was created through the confederation of Upper and Lower Canada, Nova Scotia and New Brunswick. Prince Edward Island joined the Dominion in 1873 and in 1869 Canada purchased from the Hudson's Bay Company the vast middle west (Prince Rupert's Land) from which the provinces of Manitoba (1870), Alberta and Saskatchewan (1905) were carved. In 1871 British Columbia joined the Dominion. The country was linked from coast to coast in 1886 by the Canadian Pacific Ry.

During the formative years between 1867 and 1896, the Conservative Party led by Sir John A. Macdonald governed the country. In 1896 the Liberal Party took over and under Sir Wilfrid Laurier, an eminent French Canadian, ruled until 1911. At the outbreak of World War I, Canada joined England; more than 500,000 Canadian soldiers fought for the Allied cause. After the Treaty of Versailles, Canada, a full-fledged nation, was admitted to the League of Nations and appointed its own representatives in foreign countries. By the Statute of Westminster, 1931, the British Dominions, including Canada, were for-

Canadian Governors General and Prime Ministers Since 1867

Term of office	Governor General	Term of office	Prime Minister	Party
1861-1868	Viscount Monck	1867-1873	Sir John A. Macdonald	Conservative
1868-1872	Baron Lisgar			
1872-1878	Marquess of Dufferin and Ava	1873-1878	Alexander Mackenzie	Liberal
1878-1883	Marquess of Lorne	1878-1891	Sir John A. Macdonald	Conservative
1883-1888	Marquess of Lansdowne	1892-1894	Sir John S. D. Thompson	Conservative
1888-1893	Baron Stanley of Preston	1894-1896	Sir Mackenzie Bowell	Conservative
1893-1898	Earl of Aberdeen	1896 (2 mos)	Sir Charles Tupper	Conservative
1898-1904	Earl of Minto	1896-1911	Sir Wilfrid Laurier	Liberal
1904-1911	Earl Grey	1911-1917	Sir Robert L. Borden	Conservative
1911-1916	Duke of Connaught	1917-1920	Sir Robert L. Borden	Unionist
1916-1921	Duke of Devonshire	1920-1921	Arthur Meighen	Unionist National Conservative
1921-1926	Viscount Byng of Vimy	1921-1926	W. L. Mackenzie King	Liberal
1926-1931	Viscount Willingdon	1926 (3 mos)	Arthur Meighen	Conservative
1931-1935	Earl of Bessborough	1926-1930	W. L. Mackenzie King	Liberal
1935-1940	Baron Tweedsmuir	1930-1935	Richard B. Bennett	Conservative
1940-1946	Earl of Athlone	1935-	W. L. Mackenzie King	Liberal
1946-	Field Marshal Viscount Alexander			

mally declared to be partner nations with Britain and the British Empire equal in status, bound together only by allegiance to a common Crown. The Liberal Party under W. L. Mackenzie King won the elections in 1935 and was returned to power in 1940 and 1945. The Prime Minister's request for authority to send drafted men overseas during World War II was overwhelmingly approved by direct national vote in April 1942 with only the province of Quebec, which is mostly French, voting against it.

PROVINCES AND TERRITORIES

Provinces	Land area (sq. mi.)	Population (census of 1941)
Alberta	248,800	796,169
British Columbia	359,279	817,861
Manitoba	219,723	729,744
New Brunswick	27,473	457,401
Nova Scotia	20,743	577,962
Ontario	363,282	3,787,655
Prince Edward Island	2,184	95,047
Quebec	523,534	3,331,882
Saskatchewan	237,973	895,992
Territories		
Northwest Territories	1,258,217	12,028
Yukon	205,346	4,914

GOVERNMENT. Canada, one of the five self-governing dominions of the British Empire, is a federal union of 9 provinces whose powers are laid down in the British North America Act of 1867. This Act is the fundamental law of the Canadian Constitution. The executive powers nominally rest in the hands of the Governor General, who represents the King and is appointed by the British Government. Actually, the Governor General acts only with the advice of the Canadian Prime Minister and the members of the Cabinet who at the same time sit in the Dominion Parliament. The Parliament has two houses: a Senate numbering 96 members appointed for life, and a House of Commons numbering 245 members apportioned according to provincial population. Elections are held whenever the party in power is voted down in the House of Commons or considers it expedient to appeal to the people on its record; but Parliament may not continue in office longer than 5 years. The Prime Minister is the leader of the party which wins the majority of the seats in the House of Commons at an election. Laws, to become effective, must be passed by both houses of Parliament and signed by the Governor General in the King's name. The results of Parliamentary elections on June 11, 1945 were as follows: Liberals, 118; Progressive Conservatives, 66; Cooperative Commonwealth Federation, 28; Social Credit, 13; Populaire Canadien, 2; Labor Progressive, 1.

The members of the Cabinet include: W. L. Mackenzie King (Prime Minister and

External Affairs), W. McL. Robertson (Minister without Portfolio), J. A. Glen (Mines and Resources), Louis S. St. Laurent (Justice and Attorney General), Alphonse Fournier (Public Works), Lionel Chevrier (Transport), Ian A. Mackenzie (Veterans Affairs), J. L. Ilsley (Finance), H. F. G. Bridges (Fisheries), C. D. Howe (Supply and Reconstruction), J. G. Gardiner (Agriculture), James U. McCann (National Revenue), Humphrey Mitchell (Labor), J. A. Mackinnon (Trade and Commerce), Paul Joseph Martin (Secretary of State), Ernest Bertrand (Postmaster General), Colin Gibson (Air), Douglas C. Abbott (Army and Naval Services), Brooke Claxton (National Health and Welfare) and Joseph Jean (Solicitor General).

The nine provincial governments are nominally headed by Lieutenant Governors appointed by the Dominion Government, but the executive power actually is vested in the Cabinet headed by a Prime Minister who is the leader of the majority party. In eight out of the nine provinces the legislature is composed of a one-house legislative assembly elected by the people for a term of 5 years. In Quebec there is also a second chamber, called the legislative council, composed of nominees of the Provincial Government. To each province are reserved certain powers, among the most important of which are the rights to make laws concerning education and water power.

JUDICIAL SYSTEM. The judicial system consists of a supreme court in Ottawa with appellate jurisdiction and a supreme court in each province as well as county courts with limited jurisdiction in most of the provinces. The Governor General in Council appoints the judges of these courts. English common law is used, except in Quebec, where civil law is used in civil cases.

DEFENSE. Canadian armed forces, consisting of the Army, Royal Canadian Air Force and the Royal Canadian Navy, are under the Ministry of National Defense. The Army, which had a strength of only 4,500 regulars in 1939, had grown to almost 500,000 by May 1945; of these almost 300,000 were on overseas duty. During the war the strength of the air force rose to a maximum of over 200,000, about a third of whom served overseas. The Navy, which was composed of 13 ships and 1,800 personnel in 1939, reached a wartime peak of 370 ships, 550 patrol vessels and over 95,000 personnel. Total Canadian casualties in the war were 104,125, including 41,371 dead. Conscription was in effect during the war under the National Resources Mobilization Act of 1940, but the conscripts were employed principally for home defense services, and only a few saw overseas service. Almost all of Canada's overseas force were composed of volunteers.

The Royal Canadian Mounted Police is the constabulary maintained by the Dominion Government. In 1943 it had a strength of about 5,000. Its duties include the enforcement of smuggling laws, suppression of traffic in drugs and protection of government buildings and dockyards. It is the sole police force operating in the Yukon Territory and the Northwest Territories.

EDUCATION. Control of education is specifically delegated to the provinces by the British North America Act of 1867. Elementary schools in all provinces except Quebec are free, and the same is true of secondary education in most provinces. The supreme education authority in Quebec is a council of public instruction with two aides supervising the Roman Catholic and Protestant schools respectively. Fees paid by parents having children of school age help defray the cost of education. In the rest of the provinces the system is non-denominational, and education for the most part is compulsory for all children between the ages of 8 and 14. Of Canada's 13 universities, 6 are state controlled and 7 are independent of provincial control. The two leading universities are Toronto, which belongs to the first group, and McGill (Montreal) which belongs to the second group.

VITAL STATISTICS. In 1942 the birth rate was 23.4 per 1,000 population and the death rate 9.7 per 1,000. During the same year the marriage rate was 10.9 per 1,000. The immigration movement reached its peak in 1913, when 402,432 immigrants were enumerated. Immigration fell off sharply during World War I but rose in the post-war years to a peak of 167,723 in 1929. Immigration for the year 1945 totaled 15,306.

AGRICULTURE. Agriculture, including horticulture, fruit-growing and the raising of stock and poultry, is the largest single industry. Of the total land area, 549,660 square miles of 15.8 percent, consists of agricultural land. Canadian farming is based almost entirely on relatively small individual holdings. Canada is one of the world's greatest wheat-exporting countries; production is concentrated in Manitoba, Saskatchewan and Alberta. Canada is a leading producer of other cereals. Apple growing, carried on in Nova Scotia, southern Quebec and central Ontario, is the chief feature of horticulture; other fruit growing regions are the Niagara and Lake Huron districts and southern British Columbia. Sugar beet cultivation is assuming increasing importance. Tobacco is produced in southern Ontario. The production of honey and maple sugar is also important. The estimated value of field crops in 1945) was \$1,098,859,000.

MAJOR AGRICULTURAL CROPS 1943

Crop	Acreage	Tons
Barley	8,397,000	5,173,488
Flaxseed	2,948,000	501,508
Oats	15,407,000	7,712,352
Potatoes	533,000	2,438,296
Rye	576,000	200,004
Wheat	17,488,000	8,809,000

Stock raising and dairy farming has grown greatly since 1920. Ontario and Quebec are the most important dairying provinces. In 1943 Canada had 9,665,000 cattle, 8,148,000 swine, 3,459,000 sheep, 2,775,000 horses, and 79,134,000 poultry. Dairy production (1945) included butter, 94,493,000 pounds, milk, 17,600,000,000 gallons and eggs, 395,019,000 dozen. Animals slaughtered (1945) included: cattle, 1,747,362; calves 768,427; hogs 5,477,325 and sheep 1,133,980.

INDUSTRY. Canadian manufactures rely mainly on domestic raw materials; growing industries which depend largely on materials imported in a raw or semi-finished state include the manufacture of automobiles, sugar and rubber goods as well as the iron and steel industry in Nova Scotia, Quebec and Ontario. The latter two provinces account for over 80 percent of all manufactures. The abundance of cheap water power is one of the chief factors in the growth of Canadian industry. Estimated steel production (1945) was 2,836,000 tons. In 1941 there were 26,293 industrial establishments with 961,178 workers and an output valued at \$5,523,910,952. Most important, in order of value of output, were: food, \$812,313,022; textile, \$313,503,760; clothing, \$292,348,851; chemical, \$276,727,513; and electrical, \$161,730,407.

TRADE. Canada is one of the great trading nations of the world. The bulk of its trade is in raw or semi-finished products. Commodities exported in 1943 were valued at \$2,701,338,000. The 12 major exports for that year were automobiles 8.1 percent; wheat, 7.19 percent; newsprint, 4.9 percent; meat, 4.4 percent; aluminum, 4.2 percent; wood pulp, 3.4 percent; lumber, 2.5 percent; wheat flour, 2.2 percent; nickel, 1.9 percent; fish, 1.9 percent; furs, 0.9 percent; beans, 0.9 percent. The principal destinations for these exports in 1943 included: United States, 38.7 percent; United Kingdom, 34.7 percent; Australia, 1.6 percent; Newfoundland, 1.4 percent; British South Africa, 1.2 percent.

Imports for the year 1943 totaled \$1,577,341,000. Major sources of imports included: United States, 82.1 percent; United Kingdom, 7.8 percent; New Zealand, 1.4 percent; India, 1 percent; Australia, 0.7 percent. The principal imports were machinery, coal, automobile parts, petroleum, rolling-mill products, cotton goods, electrical apparatus, engines and boilers, fruit, raw cot-

ton, raw wool, sugar, aluminum, woolen goods, rubber products and farm implements.

COMMUNICATIONS. Because Canada's exports are to a large extent bulky raw materials, cheap water transportation is essential. The country's system of canals, especially those connecting the Great Lakes, forms an integral part of the inland communications system. Canal traffic mounted to 20,899,639 tons in 1942 and 21,476,194 tons in 1943. In 1943, 23,472 vessels passed through the Canadian canals.

Railway facilities have been improved in relation to the export of wheat from the prairie provinces and to the development of the mineral and wood pulp industries in northern Quebec and northern Ontario. About 90 percent of Canadian railway mileage (42,742 miles) is under the control of two systems, the government-owned Canadian National (22,799 miles) and the privately-owned Canadian Pacific (17,153 miles). Total capitalization in 1940 was \$3,380,033,172. Freight carried by the Canadian National during 1945 was estimated at 78,900,000 tons and passengers 32,000,000. Canadian Pacific revenue freight was estimated at 55,220,951 tons and passengers at 18,180,765 for the period Nov. 1944-Nov. 1945. Canada's principal merchant marine lines are the Canadian Pacific, which operates a subsidiary ocean steamship company, and the Canadian National, which has minor steamship lines under its control. In 1941 the total tonnage entered at Canadian ports was 79,536,482. In 1942 Canada had 564,538 miles of roads, of which 122,689 were improved and 441,849 unimproved. Motor vehicles had increased to 1,500,829 by 1940. Each province has its own system of regulation.

Canada's national air service, the Trans-Canada Air Lines, was established in 1937. The number of revenue passengers carried in 1944 was 388,719, and 15,453,029 revenue miles were flown. Revenue freight amounted to 10,812,867 pounds and mail to 6,716,167 pounds. In 1944 Canada had 1,692,162 telephones and in 1945, 1,759,100 licensed radio sets. In 1942 there were 102 radio broadcasting stations and 52,418 miles of telegraph lines.

FINANCE. Estimated revenue (1944-45) was \$2,697,000,000; expenditure \$5,152,000,000. The total national debt (Mar. 31, 1945) was \$11,298,400,000.

TOPOGRAPHY. Canada may be divided roughly into five regions: (1) The so-called Archaean Protaxis—including all of Labrador, most of Quebec, northern Ontario, northern Manitoba, and the Northwest Territories with Hudson Bay in the center—which is an important source of minerals, water power, and wood pulp. (2) The Acadian region—the maritime prov-

inces of eastern Canada, including Nova Scotia, New Brunswick, Prince Edward Island, and the analogous southeastern part of Quebec—which with a very irregular and extended coast line on the Gulf of St. Lawrence and the Atlantic, may be regarded as a northern extension of the Appalachian range. (3) The St. Lawrence plain—covering most of southern Quebec and southern Ontario—which affords the largest stretch of cultivable land in eastern Canada. The region is separated from the prairies by a plateau of wild forest lands rising from Lakes Superior and Huron; (4) The interior continental plain—comprising the southern parts of Manitoba and Saskatchewan and most of Alberta—which ranges in width from 800 miles at the U. S. border to less than 400 miles at the Arctic Ocean and which has the most fertile soil in Canada; and (5) The Cordilleran belt—covering all of British Columbia and the Yukon territory and a part of western Alberta—which is made up of several parallel ranges of mountains, the eastern one constituting the Rocky Mountains proper. The Pacific border of the coast range is ragged with fjords and channels.

CLIMATE. Canada has great variations of climate. South of the Gulf of St. Lawrence the Maritime provinces average 40° for the year and over 60° for the summer months. In Quebec and northern Ontario the winters are cold and the summers average from 60 degrees to 65 degrees. In southern Ontario the average summer temperature is 65, with an occasional rise to 90. The prairie provinces have a distinctly continental climate with comparative short warm summers and long cold winters. In the mountain regions of the west coast the climate is extremely varied and the coast itself has a climate similar to the southern coast of England. Northwest and northeast of Hudson Bay the climate is too severe for the growth of trees.

HYDROGRAPHY. Canada has an abundance of lakes large and small. In addition to the Great Lakes on the United States border, there are nine others which have a length of more than 100 miles and 35 which are more than 50 miles long.

The two principal river systems are the Mackenzie and the St. Lawrence. The St. Lawrence with its tributaries is navigable for over 1,900 miles and is the commercial artery of eastern Canada. The northern parts of Alberta and Saskatchewan and much of northern British Columbia are drained through the Athabasca and Peace Rivers, first northeastward towards Athabasca Lake and then north through Slave River to Great Slave Lake and finally northwest through the Mackenzie River to the Arctic Ocean. If measured to the head of Peace River, the Mackenzie has a length

more than 2,000 miles and is navigable for 1,292 miles.

As most of the Canadian rivers have waterfalls on their courses they are of much importance as sources of power. On January 1, 1944 the available horse power at ordinary six months flow was 39,511,700; on the same date turbine installations accounted for 10,214,515 h.p. The number of power plants in 1942 was 616 and the capital invested \$1,747,891,789.

MINERALS. Metals mined in Canada come mainly from two widely separated regions, the mountain ranges of the Pacific coast and the province of Ontario. Deposits of copper ore also exist in Quebec and Manitoba.

MAJOR MINERALS 1942

Mineral	Amount
Asbestos	439,459 tons
Coal	18,864,030 tons
Copper	301,831 tons
Gold	2,651,250 oz.*
Lead	256,071 tons
Nickel	142,606 tons
Petroleum	10,364,796 bbl.
Silver	12,778,859 oz.*
Sulphur	303,714 tons
Zinc	290,129 tons

*1945.

FORESTS, WILD LIFE, AND FISHERIES. The total area of land covered by forests is estimated at 1,220,405 square miles, of which 770,565 square miles are productive and accessible. Lumber production in 1943 was 4,640,000,000 board feet. The manufacture of pulp and paper is one of Canada's leading industries. Fishing is Canada's oldest industry, and is carried on along the Atlantic and Pacific coasts and on the inland lakes. The most important fish are salmon, cod, herring, mackerel, sardines, halibut and haddock. The total value of the products of Canada's fisheries in 1942 was over \$70,000,000.

Fur farming and trapping is also important. Trapping is carried on principally in the North while Quebec, Ontario and Prince Edward Island lead in the number of fur farms. The more important animals raised on fur farms are fox, muskrat, beaver, mink, raccoon, martin and fisher. For the years ending June 30, 1943, 7,355,304 pelts valued at \$27,694,164 were taken. Annual fur auctions are held at Montreal and Winnipeg.

FALKLAND ISLANDS AND DEPENDENCIES

This sparsely inhabited crown colony consists of a group of islands in the South Atlantic about 330 miles east of the Straits of Magellan. The chief industry is sheep raising and apart from the production of wool (1938: 2,000 tons), hides and skins and tallow, there are no known resources. Sheep number about 600,000. The whaling

industry is carried on successfully from South Georgia island; 77,817 barrels of whale oil were exported in 1941. Stanley Harbor was an important naval base during World War II. The governor is Sir Allan W. Cardinell.

JAMAICA AND DEPENDENCIES—Status: Colony.

Capital: Kingston (population 1943: 109,056).

Governor: Sir John Huggins.

Foreign trade (1942): exports, £3,840,488; imports, £5,515,034; chief export, sugar.

Agricultural products: sugar (1945: 152,226 long tons), citrus fruits, bananas, ginger, coffee, pimento (1938: 4,336 tons).

Jamaica, the largest island in the British West Indies (4,470 square miles) is eighty miles south of the eastern end of Cuba. Its island dependencies include the Turks and Caicos Islands (165.5 square miles), Cayman Islands (104 sq. mi.) and two uninhabited cays. It was discovered by Columbus in 1494 and remained in Spanish possession until 1655 when it was taken by the British. According to the new constitution (Nov. 20, 1944) the Governor is assisted by a House of Representatives of 32 popularly elected members; a Legislative Council (upper house) of 15 members and an Executive Council of 10 members, 5 of whom are elected by the House of Representatives. Every person over 21 has the vote. Jamaican sites were leased for 99 years to the U. S. in 1940 for naval and air bases.

The colony's economy depends on agriculture. About 200,000 acres are under cultivation. Sugar took the place of bananas as the chief crop during World War II. Jamaica is virtually the sole source of pimento. Manufactures of consumer's goods have shown considerable increases in recent years. The population (1943) included 14,793 whites, 216,250 mulattoes, and 965,944 Negroes in addition to several thousand East Indians and Chinese. Rail mileage totals 299 and highways 2,525. Air service is furnished by Pan American, British West Indies Airways and KLM.

LEEWARD ISLANDS—Status: Colony.

Capital: St. John's (Antigua) (population 10,000).

Governor: Sir Leslie Brian Freeston.

Foreign trade (1943): exports, £1,005,978; imports, £1,009,978; chief export, sugar.

Agricultural products: sugar, cotton, coconuts, citrus fruits, tobacco.

The Leeward Islands are a federated group of islands southeast of Puerto Rico, and divided into four presidencies—Antigua (108 square miles) and Dependencies (63 square miles); Virgin Islands (67 square miles); St. Kitts (68 square miles) and Nevis (50 square miles) and Dependency (34 square miles); and Montserrat (32.5 square miles). The whole federation

has a nominated Executive Council and a partially elected Legislative Council. Each presidency also has a local administration. The U. S. acquired in 1940 a 99-year lease on a naval and air base on Antigua. The islands are predominantly agricultural.

NEWFOUNDLAND AND LABRADOR—Status: Colony (dominion status suspended).

Capital: St. John's (population 1943: 55,000).

Governor: Sir Gordon Macdonald.

Foreign trade (1943-44): exports, \$38,543,-066; imports, \$56,807,806; chief export, paper.

Agricultural products: potatoes.

Minerals: iron ore (1944: 520,000 tons), lead ore, zinc, copper, gold, limestone, silver.

Forest products (1943): lumber (42,000,000 board feet), newsprint (240,000 tons), pulpwood (85,000 tons).

Sea products (1943): total exports, \$16,285,-024; cod (55,462 tons), herring, salmon, lobster.

The island of Newfoundland (42,734 square miles) is east of Canada at the mouth of the Gulf of St. Lawrence. Its mainland dependency, Labrador (110,000 square miles; pop. about 5,000) is to the northwest, across the Strait of Belle Isle.

It was discovered by John Cabot in 1497 and annexed to Britain in 1583. France recognized British sovereignty by the Treaty of Utrecht in 1713, but retained important fishing concessions. Newfoundland was a self-governing colony until Feb. 15, 1934, when financial difficulties forced suspension of its constitution. Full legislative and executive power is now vested in a governor who acts on advice of a six-member commission—three from Newfoundland and three from the United Kingdom. In January, 1941, several sites were leased to the United States for military bases.

Fishing is the main industry; Newfoundland's waters abound in cod. Over half the colony is forested, and the making of newsprint is the second industry. Agriculture is of little importance but there are extensive mineral resources. The international airport at Gander is used by half a dozen lines flying the North Atlantic.

TRINIDAD AND TOBAGO—Status: Colony.

Capital: Port of Spain (population 1942: 100,-585).

Governor: Capt. Sir Bede E. Clifford.

Foreign trade (1943): exports, \$42,030,774; imports, \$59,788,779; chief export, petroleum.

Agricultural products: sugar (1943: 70,920 tons), cocoa, coconuts.

Minerals: petroleum (1944: 22,000,000 barrels), asphalt.

The islands of Trinidad and Tobago are twelve and twenty-one miles, respectively, off Venezuela just north of the mouth of the Orinoco. Both were discovered by Columbus in 1498, and remained Spanish possessions until 1797 when the British took them. They are administered by a governor. In 1941 the United States was

granted ninety-nine-year leases on the islands for naval and air bases covering a total of 25,000 acres.

The soil is rich for the growing of tropical products. Cacao is the principal crop of both islands. Trinidad is the leading oil producer of the British Empire, and the world's most notable source of asphalt, found in Pitch Lake, thirty-eight miles southeast of Port of Spain. Port of Spain is the chief port, and a trans shipment point for Orinoco trade. About a third of the population is East Indian stock. Of the rest, the upper classes are Creoles of British, Spanish and French blood; the lower classes are Negro or various mixtures.

ASIA

Aden (See ARABIA).

Aden Protectorate (See ARABIA).

Colony and Protectorate of Aden (British)

The British colony and protectorate of Aden is situated on the volcanic southern tip of the peninsula with a 50-mile coast line on the Gulf of Aden. The colony (port) of Aden was annexed to Britain in 1839 as part of the Bombay Presidency until 1932 when it became a separate province with the chief commissioner responsible to the Indian government. In 1937 it was transferred from Indian to Imperial control as a crown colony. It is administered by a governor and commander in chief aided by an executive council. The sultans who rule their respective territories in the protectorate are responsible to him.

Aden colony is essentially a transshipment point and bunkering station and the commercial center for the Yemen and the African coast opposite. Aden Airport is a station on the Khartoum-Karachi air route. Agriculture is unimportant except for some coffee and tobacco and manufactures are limited to salt, cigarettes and native dhows. Exports in 1939 were \$18,-039,900 and imports, \$10,795,200.

Bahrein Islands (See ARABIA).

Bahrein Islands (Sheikhdom)

This archipelago off Arabia's east coast is nominally an independent sheikhdom, ruled by Sheikh Sir Salman bin Hamad al Khalifa but actually a protectorate of Great Britain which is represented by a political agent. It is the center of the Persian Gulf pearl fisheries and the site of an airport on the London-Australia route. The concession for exploitation of petroleum deposits, discovered in 1932, is held by an affiliate of the California-Arabian Standard Oil Company. Output in 1943 was 6,000,000 barrels. Agriculture is of some importance. Most of the trade of

the Saudi Arabian provinces of Nejd and Hasa pass through Bahrain. Exports in 1939, excluding petroleum, totaled \$6,936,-\$71; imports \$9,093,896. Chief exports are rice, cotton goods, pearls, coffee and tea. The capital and principal port is Manama (population 25,000) on Bahrain, the principal island.

BORNEO

BRITISH NORTH BORNEO—Status: Colony.

Capital: Sandakan (population 1931: 13,826).

Officer in charge of administration: James Calder.

Foreign trade (1939): exports, \$7,088,000; imports, \$3,489,000; chief export, rubber.

Agricultural products: rubber (1938: 13,322 tons), rice, corn.

Forest products: timber, cutch, rattans.

This colony, constituting the extreme northern portion of the island of Borneo, consists largely of highlands and occasional pen valleys and plateaus. The territory was a British protectorate administered under a royal charter granted in 1881 by the British North Borneo Company until July 1, 1946, when it assumed the status of a Crown colony. It was occupied by Japanese troops from 1942 until 1945.

The population is comprised largely of aboriginal tribesmen living on a very primitive level of culture and social organization. Mineral resources are believed to be considerable, but the colony's present wealth is based on agricultural and jungle produce.

BRUNEI—Status: Protectorate.

Capital: Brunei (population 1937: 10,453).

Sultan: Ahmed Tajudin Akhagul Khairi Wad-din.

British resident:

Foreign trade (1939): exports, \$4,067,000; imports, \$1,683,000; chief export, petroleum.

Agricultural products: rice, rubber (1937: 832 tons).

Mineral: petroleum (exports 1940: 869,000 tons).

The protectorate lies on the northwestern coast of Borneo, entirely surrounded by Sarawak. It was placed under British protection in 1888 and on January 2, 1906, a treaty was made whereby the native sultan agreed to hand over administration of the state to a British resident. Supreme authority is vested in the Sultan in Council in which the resident is a member. Japanese troops occupied Brunei from 1942 until 1945.

Most of the inhabitants are Malays; in 1911 there were 60 Europeans, 377 Indians and 2,683 Chinese. The bulk of the population lives in and around the capital, situated on the Brunei River 9 miles from its mouth. The interior is largely forested and contains rich timber resources.

SARAWAK—Status: Colony.

Capital: Kuching (est. population 30,000).

Governor: Sir Charles Clarke.

Foreign trade (1939): exports, \$17,787,000; imports, \$13,541,000; chief export, petroleum.

Agricultural products: rice, sago, pepper, rubber (1938: 20,147 tons).

Minerals: petroleum (1939, including Brunei: 7,104,000 bbl.), gold, silver, coal.

Sarawak extends along the northwestern coast of Borneo for about 500 miles. In 1841 part of the present territory was granted by the sultan of Brunei to Sir James Brooke. The state, enlarged by additional concessions made between 1861 and 1905, continued to be ruled by members of the Brooke family until the Japanese occupation in December 1941. A British protectorate since 1888, Sarawak became a Crown colony July 15, 1946, through agreement between the British government and the then ruling rajah, Sir Charles Vyner Brooke.

The colony is mountainous and very well watered; inland communication is largely by water. Most of the inhabitants are Malays and Dyaks, but there are estimated to be about 100,000 Chinese in the colony. The principal mineral is petroleum which was discovered at Miri in 1909 and subsequently worked by Sarawak Oilfields, Ltd. There are also important forest resources. Under the enlightened rule of the Brookes, Sarawak had been developed into a highly organized community prior to the Japanese invasion.

Burma (British colony)

Area: 261,610 square miles.

Population (est. 1941): 16,823,798.

Density per square mile: 64.3.

Governor: Maj. Gen. Hubert E. Rance.

Principal cities (est. 1942): Rangoon, 501,219 (capital, chief port), Mandalay, 150,000 (river port, upper Burma), Moulmein, 70,000 (seaport); (census 1931) Bassein, 45,662 (river port).

Monetary unit: Rupee.

Racial stock (est): Burmans, 60%; Shans, 7%; Chins, 2%; Kachins, 1%; Indians, 6%; Chinese, 1%; Indo-Burmans, .8%; Europeans (about 8,000) and Eurasians (about 17,000).

Languages: Burmese, English.

Religions (1931): Buddhist, 84.1%; Animists, 5.2%; Mohammedan, 4%; Hindu, 4%; Christian, 2.2%.

Burma, for hundreds of years a battleground between petty princes, became a key battleground in World War II because the 800-mile Burma Road was the Allies' vital supply line to China. The Japanese invaded the country in January, 1942 and by May had occupied most of it, cutting the road. They put in a puppet government under Dr. Ba Maw. In one of the most difficult campaigns of the war, Allied forces had liberated most of Burma by the time

of the Japanese surrender on Aug. 14, 1945. Civil government was resumed in October, 1945, but the native nationalist feeling continued strong and British control was maintained with difficulty.

In the 18th century, Burmese attacks stoutly resisted the efforts of British, Dutch and Portuguese traders to establish posts on the Bay of Bengal. The British, operating from India, were persistent and by 1886 were able through military force to annex Burma to India. On April 1, 1937, the British separated Burma from India and set it up as a crown colony with its own legislature and a British governor.

Executive authority rests with the crown-appointed governor, advised by a council of ministers responsible to the legislature. The legislature has a senate of thirty-six members, half named by the governor and half by the house of representatives, which is composed of 132 elected members.

Under present plans, a new constitution is to be drafted after the 1947 elections, with the objective, as stated by Britain, of "complete self-government within the commonwealth and a status equal to that of the dominions."

Burma had 8,270 regular schools in 1940 with 639,259 attendance, and 18,346 monastic schools had attendance of 212,636. Because of the many Buddhist village schools, the percentage of wholly illiterate men is small. There is a university at Rangoon with 2,365 students.

The natives belong to many races and speak many languages, but in general they are all Mongolian. The Burmese are the most advanced and live in the fertile lowlands. Most other races are restricted to the hills. British Indians, settled in the delta region, supply most of the coolie labor, while the Chinese constitute the artisan and merchant class. Buddhism, the national religion, profoundly affects the national character; every village has its pagoda and a monk.

Burma is essentially agricultural, with crop growing concentrated in the delta and river valleys. It is a leading producer of rice, the staple food, which occupies two-thirds of the cultivated area. Production in 1939 was 7,418,210 tons. Crops grown in the dry zone in upper Burma include millet, cotton, groundnuts and sesame. Other crops include tobacco, fruit, vegetables and cereals. About 1½ million acres are under irrigation. There are a few rubber plantations in Tenasserim. The principal domestic animal is water buffalo used as a beast of burden in the delta, and small humped oxen which predominate in other areas. Cattle, including oxen, totaled 5,162,517 in 1938.

In 1938 there were 1,019 factories with 86,303 workers. Leading industries include

silk weaving and dyeing, rice husking, oil refining and wood carving.

Exports in 1939 totaled \$161,470,000 and imports \$74,758,000. Rice accounted for 42.6 percent of the exports (3,282,000 tons); other exports included lead, tin, petroleum, other minerals, and teak. Imports included coal, iron and steel. Over one-third of the export trade and half of the import trade is with India.

The principal commercial arteries are the Irrawaddy, navigable for 900 miles to Bhamo, and its tributaries. Regular steamer service is maintained to Bhamo. Railways designed to supplement river transport totaled 2,226 miles in 1940, all state-owned. There are no rail connections with India or any other country. The length of improved roads was 3,760 miles in 1940. In addition, the Burma Road connects Lashio, a rail terminus in northern Burma, with Kunming, China.

Revenues in 1939 totaled \$54,644,118; expenditures, \$51,183,102; total national debt, \$80,312,543.

Just smaller than Texas, Burma divides into three natural regions: the Arakan Yoma, a long, narrow mountain range forming the barrier between Burma and India; the Shan Plateau in the east and extending southward into Tenasserim; and the Central Basins running down to the flat, fertile delta of the Irrawaddy in the south. This delta contains a network of intercommunicating canals and nine principal mouths. The principal rivers are the Irrawaddy, Sittang, and Chindwin draining the Central Basin, and the Salween draining the Shan Plateau.

Mineral resources are considerable but, in many cases, undeveloped. Production by the Burma Oil Company, Ltd., in 1939, was 7,396,000 barrels. The output of the Burma Corporation in the northern Shan states in 1939 was 85,120 tons of lead, 6,175,000 ounces of silver. Other minerals include tin, zinc, nickel, cobalt, copper, gold, iron ore, molybdenum, coal, rubies, sapphires and jade.

More than half of Burma is forested, with government reserves totaling 31,637 square miles. In 1940, teak valuable for naval construction totaled 308,000 tons. Its cutting is strictly controlled. Other forest products include pyngado, bamboo, and cutch—a yellow dye. Fisheries are exploited both on the coast and inland.

CEYLON—Status: Self-governing colony.

Capital: Colombo (census 1931: 284,155).

Governor: Sir H. Monck-Mason Moore.

Foreign trade (1943): exports, \$161,700,000; imports, \$127,200,000; chief exports, tea, rubber.

Agricultural products: tea (exports 1943: 131,450 tons), rubber (137,500 tons), rice, copra.

The island of Ceylon lies in the Indian Ocean, separated from India on the north-west by the Gulf of Manaar and Polk Strait. It was settled in 1505 by the Portuguese who were ousted in the middle of the 17th century by the Dutch. An English force took over the island in 1796 and it became a crown colony in 1798. Under a constitution promulgated in February 1947, Ceylon is a self-governing colony with a bi-cameral legislature, a prime minister and a cabinet appointed by the Governor General but responsible to the Legislature except with regard to seven reserved subjects including defense and foreign affairs. The Royal Navy has an extensive base at Trincomalee and during World War II the headquarters of the Southeast Asia Command were at Kandy.

Its heterogeneous population (1943) included 4,113,000 Sinhalese, 1,527,000 Tamils, 39,000 Moors, 40,000 Burghers (descendants of early Dutch settlers) and Eurasians, and 11,000 Europeans. About two-thirds of the population speak Singhalese, an Aryan language closely related to Pali. The principal religions are Buddhism (about 60 percent), Hinduism (about 20 percent) and Christianity (about 10 percent).

Ceylon's prosperity depends upon agriculture, tea and rubber, the main products, are grown largely on plantations. Railways in 1943 totaled 912 miles and highways, 6,551. The monetary unit is the rupee. In 1942, there were 5,799 schools with 785,936. Literacy is estimated at 60 percent. The Maldiv Islands, 400 miles to the southwest, are a dependency.

In World War II, it became necessary for Ceylon not only to grow many of the foodstuffs hitherto imported but vastly to increase its exports. A steel-rolling plant was established in 1941, as well as other factories for new products.

CYPRUS—Status: Colony.

Capital: Nicosia (population 1943: 29,875).

Governor: Lord Winster.

Foreign trade (1943): exports, \$8,370,300; re-ports, \$447,330; imports, \$10,526,000; chief port, copper concentrates.

Agricultural products: barley, wheat, potatoes, wine, fruit (including carobs).

Minerals: copper ore (concentrates) (1938: 1,542 tons); pyrite ore (1938: 568,018 tons).

Cyprus, the third largest island in the Mediterranean, is located at roughly equal distance from the coasts of Asia Minor to the north and of Syria to the east. The site of early Phoenician and Greek colonies, passed in 1571 from the rule of Venice to that of the Ottoman Empire under which it remained until 1878 when it was ceded

Great Britain for administrative purposes. On the outbreak of hostilities with Turkey (November 5, 1941) the island was formally annexed to Great Britain. The governor is assisted by a nominated Execu-

tive Council, but he alone possesses the lawmaking power.

The people are mainly Greeks and Turks, although there is an Armenian colony and a distinct, though not numerous, Latin colony. More than 80 percent of the population is Christian. Agriculture is the principal industry. Sponge fishing is also important as well as copper mining. In 1943 there were 886 miles of main road, 1,716 miles of secondary road, and 71 miles of railroad. There are no natural harbors.

HONG KONG—Status: Colony.

Capital: Victoria (population 1931: 447,829).

Governor: Sir M. A. Young.

Foreign trade (1939): exports, \$146,436,000; imports, \$163,131,000; chief export (and import), food and provisions.

Agricultural products: rice, sugar cane.

Sea products (1939): 26,000 tons.

Major industries: shipbuilding, rope making, cement, sugar refining, textiles.

The colony of Hong Kong comprises the island of Hong Kong, at the mouth of the Canton River about 90 miles southeast of Canton, Stonecutter's Island, and the Kowloon peninsula, on the adjoining mainland, in addition to the New Territories (356 square miles) which are mainly agricultural lands. The latter were leased from China for 99 years in 1898, while Hong Kong itself was ceded to Britain by China in 1841. Hong Kong was attacked by Japanese troops December 7, 1941, and remained under Japanese occupation from December 25, 1941, until September 1945. The governor is assisted by nominated executive and legislative councils composed of both official and unofficial members.

Possessing an excellent natural harbor, 17 miles in extent, the only safe deep sea anchorage between Shanghai and Indo-China, Hong Kong is the entrepôt for trade throughout southern China and the western Pacific, re-exports normally constituting about two-thirds of the imports and nine-tenths of the exports. The total tonnage of ships entered and cleared from the colony (1938) was 34,130,246. There are only a few important duties and for practical purposes Hong Kong may be considered a free port. The colony is also an important British military and naval base.

The towns of Victoria and Kowloon contain the greater part of the population which is overwhelmingly Chinese. Besides those Chinese engaged in agriculture or industry, a large population lives in sampans or junks either in Victoria Harbor or neighboring bays. Agriculture and fisheries support a large part of the population. About 20 percent of the total area is under cultivation, most of it in the New Territories. Manufacture of consumers goods, both for local consumption and for export, is also important. In 1938 the colony had 22 miles of railroad and 371 miles of highway.

India (Empire)

Area: 1,581,410 square miles.

Population (census 1941): 388,997,955.

Density per square mile: 246.0.

Sovereign: H. M. King George VI, Emperor of India.

Secretary of State for India: Lord Pethick-Lawrence.

Viceroy and Governor General: Field Marshal Viscount Wavell.

Principal cities (census 1941): Calcutta, 2,108,891 (chief port); Bombay, 1,489,883 (seaport; cotton and textiles); Madras, 777,481 (seaport); Hyderabad, 739,159 (railroad, trading center); Lahore, 671,659 (railroad, manufacturing); Ahmedabad, 591,267 (manufacturing); Delhi, 521,849 (capital, British India); Cawnpore, 487,324 (textiles, leather), Amritsar, 391,010 (Sikh holy city); Lucknow, 387,177 (railroad, trading center).

Monetary unit: Rupee.

Racial stock: See Communities.

Communities (1941): Hindu, 65.5%; Moslem, 24.3%; Christian, 1.6%; Sikh, 1.5%; Buddhist, .06%; Parsi, .03%; Others, 7%.

Principal languages (1931): Hindustani tongues, about 33%; Bengali, about 15%; Telugu, about 7%; Punjabi and Lahuda, about 7%; Marathi and Konkani, about 6%; Tamil, about 5.5%.

HISTORY. India, half the size of the United States but with two and a half times the U. S. population, was a strife-ridden land in 1946. The British were offering India political independence, but the dominant Hindus and the strong minority of Moslems were unable to agree among themselves on a formula. Often their disagreement took the form of bloody riots in which many were killed and injured.

The Aryans or Hindus who invaded India between 2400 and 1500 B. C. from the northwest found a land already well civilized. Buddhism, founded in the 6th century B. C., had spread through northern India. The first exact date in Indian history is 326 B. C., the year that Alexander the Great invaded India. Meanwhile India continued to be divided into scores of rival states.

In 1526 Mohammedan invaders founded the great Mogul empire, centered on Delhi, which lasted at least in name until 1857. Akbar the Great (1542-1605) strengthened this empire and became the ruler of a greater portion of India than had ever before acknowledged the suzerainty of one man. The long reign of his great-grandson, Aurangzeb (1658-1709) represents both the culmination of Mogul power and the beginning of its decay.

Vasco da Gama, the Portuguese explorer, visited India first in 1498, and for the next hundred years the Portuguese had a virtual monopoly on trade with India. Meanwhile, the English founded the East India Company which set up its first factory at

Surat in 1612 and began expanding its influence, fighting against the Indian rulers and the French, Dutch and Portuguese traders simultaneously.

Bombay, taken from the Portuguese, became the seat of English rule in 1687. The defeat of French and Mohammedan armies by Lord Clive in the decade ending in 1760 laid the foundation of the British Empire in India. From then, until the administration of India was formally transferred to the British Crown in 1877, the East India Company was constantly occupied with the suppression of native nationalists and the extension of British rule.

After World War I, in which even the Mohammedan states of India sent soldiers to fight with the allies, Indian nationalist unrest rose to new heights under the leadership of a little Hindu lawyer, Mohandas K. Gandhi, called Mahatma Gandhi. His tactics, of a politico-religious nature, usually called for non-violent revolts against British authority.

In 1919 the British gave added responsibility to Indian officials and provided for a greater proportion of elected members in the provincial councils. In 1935 the British gave India a federal form of government and a measure of self-rule.

In 1942 British proposals to give India a dominion status after World War II were rejected both by the all-India Congress Party of Gandhi, and by the Moslem League. In August of that year, after the Congress Party had approved a new civil disobedience program, Gandhi and 200 other Indian leaders were arrested and held as political prisoners. Meanwhile, the Moslem League, led by Mohammed Ali Jinnah, demanded a separate Moslem state made up of those provinces predominantly Moslem. Further demands of the Moslem League in June of 1945 caused the breakdown of negotiations at Simla held to arrange a great degree of Indian self-rule.

In June of 1946, although the Moslem League disapproved of the move, the British installed an interim coalition executive council. It took office on Sept. 2 and was to serve until the adoption of a new constitution for India.

NATIONAL GOVERNMENT. India is governed under a 1935 act of the British Parliament which envisioned eventual self-government within the framework of a federation composed of the provinces of British India, and of those Indian states which accepted it. The Viceroy and Governor General named by the Crown is under the Secretary of State for India in the British Cabinet.

The British Indian legislature has two chambers—the sixty-member Council of State—thirty-four elected and twenty-six appointed; and the 142-member Assembly

—forty appointed and 102 elected. Its acts are subject to veto by the Governor General who has considerable law making power of his own.

The Executive Council (Cabinet), which took office on Sept. 2, 1946, was to serve until a constituent assembly determined permanent status and form of government for India. The Moslem League boycotted both the Executive Council and the Constituent Assembly; hence the five Moslem seats in the Council went to Moslems not members of the league.

PROVINCIAL GOVERNMENT. A governor named by the Crown administers each of the eleven provinces of British India, but these have autonomy to the extent of their own elected legislatures which advise the governors.

INDIAN STATES. There are about 564 semi-independent Indian states ranging from Hyderabad with over 16,000,000 population down to tiny ones with only a few hundred inhabitants. The Governor General is represented in each one by a representative or a resident agent, and normally his control is limited to broader matters affecting India as a whole. The powers of the native princes vary widely. Most of the larger states are administered by executive councils appointed by and responsible to the rulers.

Political Subdivisions

Political subdivision	Area (sq. mi.)	Population (census 1941)
Provinces	865,446	295,808,722
Ajmer-Merwara	2,400	583,693
Andamans and Nicobars	3,143	33,768
Assam	54,951	10,204,733
Baluchistan	54,456	501,631
Bengal	77,442	60,306,525
Bihar	69,745	36,340,151
Bombay	76,443	20,849,840
Central Provinces and Berar	98,575	16,813,584
Coorg	1,593	168,726
Delhi	574	917,939
Madras	126,166	49,341,810
North-West Frontier Province	14,263	3,038,067
Orissa	32,198	8,728,544
Panth Piploda	25	5,267
Punjab	99,089	28,418,819
Sind	48,136	4,535,008
United Provinces	106,247	55,020,617
States and Agencies	715,964	93,189,233
Assam	12,408	725,655
Baluchistan	79,546	356,204
Baroda	8,236	2,855,010
Bengal	9,408	2,144,829
Central India	52,047	7,506,427
Chhattisgarh	37,687	4,050,000
Cochin	1,493	1,422,875
Deccan (and Kolhapur)	10,870	2,785,428

Political subdivision	Area (sq. mi.)	Population (census 1941)
Gujarat	7,352	1,458,702
Gwalior	26,008	4,006,159
Hyderabad	82,313	16,338,534
Kashmir (including Feudatories)	82,258	4,021,616
Madras	1,602	498,754
Mysore	29,458	7,329,140
North-West Frontier	24,986	2,377,599
Orissa	18,151	3,023,731
Punjab	38,146	5,503,554
Punjab Hill	11,375	1,090,644
Rajputana	132,559	13,670,208
Sikkim	2,745	121,520
Travancore	7,662	6,070,018
United Provinces	1,760	928,470
Western India	37,894	4,904,156
Total	1,581,410	388,997,955

JUDICIARY. The federal court is the highest tribunal for constitutional matters, and from that there is appeal to the judicial committee of the Privy Council in London. Most of the provinces have their own high courts, magistrate courts and civil courts. Most of the civil judges and magistrates are Indian.

DEFENSE. The Indian Army in 1940 had 248,953 regulars and 42,773 reserves. By the end of World War II the strength rose to 2,115,737. Of these, 1,759,000 were to be demobilized by April 1, 1947. Indian units, usually segregated by race and creed, served with distinction in Italy and Burma in World War II. The country maintains both Royal Air Force and Royal Indian Air Force outfits. Units of the Royal Indian Navy served throughout the world in World War II under Allied command.

EDUCATION. In 1942 British India had 157,827 recognized primary schools for males with 10,498,787 students, and 24,141 for females with 1,519,939 students. There were 13,367 secondary schools for males with 2,434,767 students, and 1,830 for females with 350,022 students. There also were 18,139 unrecognized schools, those not conforming to government standards, with 552,000 students; and several thousand special schools. British India has fifteen universities with 1941 enrollment of 109,098 men and 5,006 women.

POPULATION. India's population increased 11 percent in 1921-31, and 15 percent in 1931-41. The 1939 birth rate in British India was 34; the death rate, 22. About 222 different languages are spoken but the twenty-five vernaculars of the Hindus are used by about two-thirds of the people. Hindus predominate in all British Indian provinces except Bengal, Punjab, Sind, Northwest Frontier Province, and the chief commissionership of Baluchistan. Christians are most numerous in Punjab; Buddhists, in Bengal.

AGRICULTURE. Even in good crop years, India is not quite self-sufficient in agri-





culture. In 1942, about 260,000,000 acres were cultivated, about 20 percent by irrigation. A third of the cropland is devoted to rice of which India grows a quarter of the world total. Cotton, grown especially in Bombay and the Central Provinces, is the big money crop. In this India ranks second to the United States, grows about 15 percent of the world total, and exported 546,000 tons in 1938. In Bengal is grown a large share of the world's jute; 1938 exports were 837,000 tons. Wheat, tea and sugar cane are major crops also. A universal crop in India is the mixture of groundnuts, sesame, rape, mustard and linseed, which yields seeds for vegetable oil.

MAJOR AGRICULTURAL CROPS, 1941

Crop	Acres	Tons
Barley	6,255,000	2,534,560
Corn	6,253,000	2,459,920
Cotton	23,286,000	1,180,600
Groundnuts	8,770,000	4,146,240
Jute	5,669,000	1,317,200
Rice	73,063,000	24,853,920
Rubber	138,200	17,765
Sugar cane	4,598,000	6,503,840
Tea	832,800	231,941
Wheat	34,862,000	11,205,600

Cattle are used for plowing and hauling all over India, except in the delta tracts where water buffalo do the work, and in the Indus Valley where the camel predominates. The 1940 livestock census (excluding the United Provinces and Orissa) showed 130,757,765 cattle and oxen, 35,760,493 water buffalo, 961,563 camels, 49,717,044 goats, 1,710,965 horses, 1,734,679 mules and asses, and 45,107,062 sheep.

MANUFACTURING. India, whose factories doubled in number from 1922-42, is among the eight leading industrial countries of the world. Cotton textiles is the biggest industry—401 mills in 1943 made 766,868 short tons of yarn and 4,109,336,790 yards of cloth. In 1940, a total of 303,777 persons worked in 108 jute mills. In 1939 the total of all factories was 7,694 with 1,687,473 workers. Plants making or processing food, chemicals, tea, iron and steel are of especial importance. The Tata Iron and Steel Works in Bihar is the largest such plant in the British Empire, with annual capacity of over 1,000,000 tons of pig iron.

TRADE. Exports in 1944-45 were \$635,699,000; imports, \$605,353,000. Lend-lease receipts from the United States from 1941-45 totaled \$2,123,609,000. In 1943-44, the biggest suppliers were Britain, Iran, United States and Egypt, in that order, with machinery, cotton manufactures, oil, flour and grain, and metals and ore the chief imports. The biggest customers were Britain, the United States, Ceylon and Australia, in that order, with jute products, raw cotton, cheese, seeds and raw jute the chief exports.

COMMUNICATIONS. In 1939-40, total tonnage of vessels in foreign trade handled at ports in British India was 20,936,550, of which about 65 percent was British. Tonnage handled in the inter-port trade totaled 27,282,326. Rail mileage in 1943 was 40,925, mostly Imperial State Lines. Passengers carried in 1942-43 totaled 622,333,110; freight, 95,253,000 tons. Highway mileage in 1939 totaled 280,746, of which 207,514 was improved. Licensed cars and taxis in British India in 1940 numbered 94,788. In all of India in 1941, there were 121,534 radios and 86,219 telephones.

FINANCE. Estimated revenue for the central government for 1945-46 was \$1,071,980,000; expenditures, \$1,563,640,000. The public debt in March of 1945 was \$5,675,800,000.

NATURAL FEATURES AND RESOURCES. India, which has extreme dimensions both north-south and east-west of about 1,900 miles, is roughly a great triangle. The apex points south. The base, in the north, is the Himalayas, south of which lie extensive plains drained by the Ganges, Sutlej-Indus and Brahmaputra river systems. The largest is the Indo-Gangetic plain extending from the Bay of Bengal on the east to the Afghan frontier and the Arabian Sea on the west. It is the richest and most densely settled part of India, containing more than half of the population.

Another distinct natural region is the Deccan, a plateau of 2,000 to 3,000 feet of elevation occupying the southern or peninsular portion of India. In several regions, the Deccan is quite mountainous. Administratively a part of India are several groups of islands—the Laccadives (fourteen islands totaling 80 square miles) in the Arabian Sea; and the Andamans (204 islands totaling 2,508 square miles) and the Nicobars (nineteen islands totaling 635 square miles) in the Bay of Bengal.

India's three great river systems, all rising in the Himalayas, have extensive deltas. The Ganges flows south and then east for 1,500 miles across the northern plain to the Bay of Bengal; its delta begins 220 miles from the sea. The Indus, starting in Tibet, flows northwest for several hundred miles before turning southwest toward the Arabian Sea; it is important for irrigating arid areas in western India. The Brahmaputra, also rising in Tibet, flows eastward first and then south into India and the Bay of Bengal.

India's climate varies from temperate in the north to tropical in the south, where temperatures are almost constant the year around. During the November-February cold season, northern India has a climate like that of the Riviera. From March to June steadily rising temperatures reach a peak sometimes as high as 115 degrees, and then comes the southwest monsoon. Rainfall is heavy in most of India, averaging

fifty to sixty inches in Assam and Bengal, and reaching 500 inches in the Garo hills of Assam. Northwest India receives the least rainfall.

India's most valuable mineral is coal, found throughout most of the country. In 1938, the average number of persons employed daily in coal mining was 226,887. Manganese ore is mined in the Central Provinces; gold in the State of Mayurbhanj and Orissa. Assam and the Punjab produce oil. Other mineral products include ilmenite, saltpeter, chromite, monazite, diamonds, magnesite, zircon, silver, graphite, tungsten ore and sapphires.

MAJOR MINERALS, 1938

Minerals	Amount	U. S. dollars
Coal	31,935,836 tons	38,942,610
Manganese ore	1,084,072 "	14,378,760
Gold	321,138 oz.	11,151,557
Petroleum	2,488,000 bbl.	6,053,467
Salt (including rock)	1,724,410 tons	.....
Iron Ore	3,072,894 "	.....
Mica	9,806 "	4,144,177
Copper	5,970	1,610,992

In 1942, forests in British India covered 97,403 square miles, about 11 percent of the total area. Three-fourths of this area was in preserves controlled by the provincial governments. Average annual production of timber and firewood is over 300,000,000 cubic feet. Among the major forest products are timber of teak, conifers and sandalwood, and bamboo, fibers, gums and resins. India exploits its fisheries extensively, both in the rivers and off the coasts.

MALAYAN UNION and SINGAPORE—Status: protectorate and Crown colony.

Capital: Singapore (population 1937: 520,164).

Governor General: Malcolm Macdonald.

Governor of Malayan Union: Sir E. Gent.

Governor of Singapore: F. C. Gimson.

Foreign trade (1938): exports, \$324,037,000; imports, \$311,114,000; chief export, rubber (47.9 percent).

Agricultural products: rubber (1938: 404,206 tons), rice, coconuts.

Minerals: tin ore (metal content), (1939: 3,265 tons), iron ore (1938: 1,770,625 tons), gold (1938: 40,794 oz.), tungsten (1938: 2,204,000 lbs.), bauxite, manganese ore.

Forest products: timber, jelutong, gutta percha, arecanuts.

British Malaya consists of nine semi-independent states occupying most of the Malay Peninsula and of the island of Singapore off its southern tip together with several smaller islands. The native states were brought under British administration by a process of commercial contact and political expansion in the late 19th and early 20th centuries and by the

Anglo-Siamese Treaty of 1909. Singapore, founded in 1819 by Sir Stamford Raffles, had been developed into the principal British naval base in the Far East prior to World War II. Japanese troops invaded the Malayan States in December 1941, and captured Singapore February 16, 1942.

By Orders in Council effective April 1, 1946, the Malayan Union was formed from the former "Federated Malay States"—Perak, Pahang, Selangor, Negri Sembilan—the former "Unfederated Malay States"—Johore, Trengganu, Kelantan, Kedah and Perak—and all parts of the former "Straits Settlements" except Singapore—thus including the settlement of Penang (George-town, the island of Penang and Province Wellesley) and the settlement of Malacca. The Crown colony of Singapore, comprised of the island of Singapore and its dependencies—the Cocos or Kneeling Islands, and Christmas Island—remains outside the Malayan Union. Each political entity—the Malayan Union and Singapore—has a governor responsible to the governor general of the Malayan Union and Singapore. Actual administration in each Malay state is carried on by a British resident, although nominal powers are vested in the native sultan in each state.

Palestine (British Mandate)

Area: 10,159 square miles.

Population (est. 1945): 1,750,000.

Density per square mile: 171.2.

British High Commissioner: Lt. Gen. Sir Alan Gordon Cunningham.

Principal cities (est. 1944): Jerusalem, 155,314 (capital, religious center); Tel Aviv, 155,277 (Jewish communal center); Haifa, 125,498 (chief port); Jaffa, 93,443 (seaport).

Monetary unit: Palestinian pound (£P).

Languages: English, Hebrew, Arabic.

Religions (est. 1944): Mohammedan, 60%; Jewish, 30%; Christian, 7.5%; Others, 2.5%.

The history of Palestine is for the most part a chronicle of invasion, conquest and confusing divisions. To the ancient Hebrews it was known as the "Land of Canaan"; the name Palestine is derived from that part of the country inhabited by the Philistines in olden times. About 1000 B. C. the Hebrews succeeded in establishing a single monarchy which later split up into two kingdoms—Judah and Israel. The country was subsequently invaded and overcome by many nations, including the Assyrians, Babylonians, Egyptians, Persians, Macedonians, Romans and Byzantines. In the 7th century (634-36) A. D., Palestine was wrested from the Byzantine Empire by the Arabs. Frankish Crusaders captured Jerusalem in 1099 and set up a feudal kingdom which endured until the defeat of the Franks by Saladin (1187) and the restoration of Moslem rule.

In 1516 suzerainty over the area was transferred from the Mamelukes of Egypt to the Turks. It remained part of the Ottoman Empire until World War I, when British forces under General Allenby defeated the Turks. The League of Nations mandate awarded to Britain was put in force Sept. 29, 1923.

Meanwhile, a movement had been founded in 1897 by Theodor Herzl to create a Jewish homeland in Palestine, and a considerable number of Jewish immigrants had entered the country prior to World War I. On Nov. 2, 1917 official British recognition was given both to the growing Arab nationalist movement and to the Zionist aspirations by the issuance of the so-called Balfour Declaration which read:

"His Majesty's Government view with favour the establishment in Palestine of a national home for the Jewish people, and will use their best endeavours to facilitate the achievement of that object, it being understood that nothing shall be done which may prejudice the civil and religious rights of existing non-Jewish communities in Palestine, or the rights and political status enjoyed by the Jews in any other country."

The declaration was attacked by both Arabs and Zionists. Throughout the period between the two World Wars, outbreaks of violence and open revolt occurred. Jewish immigration continued apace, especially after the rise of Hitler. A British royal commission report approved by the British Government July 7, 1937 reached the conclusion that the Arab and Jewish positions were irreconcilable and recommended the partition of Palestine into an Arab and a Jewish state separated by a mandated area in the vicinity of Jerusalem. The Zionists seemingly acquiesced, but the Arabs opposed the proposal and resumed armed opposition to the Jews. At a Zionist-Arab meeting held in London in 1939, the Arabs continued their opposition to Palestine's partition, proposing instead the establishment of an independent Palestine with full minority rights for the Jews. In May, the British Government issued a White Paper declaring the establishment of a Jewish state contrary to British obligations to the Arabs and promising, after a transitory period of ten years, the establishment of an independent Palestine in which Arabs and Jews would share authority in government. During the next five years, 75,000 Jews were to be allowed to enter Palestine. These proposals did not satisfy either party but the outbreak of World War II overshadowed all local issues.

Arab-Jewish cooperation in the war effort began a period of order, but the end of European hostilities brought a renewal of friction, and the formation of the Arab

League in 1945 served to crystallize lines of opposition. By 1946, there were many individual acts of terrorism by the Irgun Zvai Leumi, an illegal army, and the Stern group, two minor Jewish factions for whom the Jewish Agency denied responsibility. Both embarked on a campaign of open violence in protest against Britain's refusal to admit 100,000 Jewish refugees to Palestine. On July 25, 1946, a proposal was made in London for a federalized Palestine partitioned into Arab, Jewish and British districts and subject to a British-controlled central government. The plan had British support, but was disclaimed by the U. S. State Department and proved unacceptable to Arabs and Jews alike.

Palestine is administered by Great Britain under a mandate awarded by the League of Nations. The civil administration is headed by the British High Commissioner who is also commander in chief and may exercise extraordinary powers in the event of emergency. The country is divided into six districts headed by district commissioners. The Jewish community enjoys a great amount of autonomy for its internal affairs through an Elected Assembly and a General Council (*Va'ad Leumi*) which administers the affairs of the community and represents it in its relations with the Government. The Rabbinical Council has jurisdiction in matters of Jewish personal status, while the Jewish Agency for Palestine is the recognized agency in all matters pertaining to the upbuilding of the Jewish National Home. It also supervises Jewish immigration. The Moslem Supreme Council controls Moslem religious affairs.

Civil courts exercise jurisdiction in all cases except matters of personal status in which religious courts have jurisdiction, and in cases involving violations of martial law or security regulations in which military courts may exercise jurisdiction. The Supreme Court of Palestine is composed of the Chief Justice and three other British judges and four Palestinian judges.

Palestine is garrisoned by a varying number of British Imperial divisions and by units of the Royal Air Force. There is also a police force of about 6,000, about half of whom are British Christians and a quarter, Moslems. The remainder are Palestine Christians and Jews.

Education in Palestine is neither compulsory nor universal. The public system consists of Government Arab schools and of Jewish schools administered by the Jewish General Council but subject to Government inspection. In 1941-42, the Arab system had 404 schools (12 with secondary sections) with 56,558 scholars; the Jewish public schools numbered 442 (including 5 training colleges and 26 secondary, 6 trade and vocational schools) with 62,655 scholars. There were 177 private

Moslem schools with 14,751 scholars, 309 private Jewish schools with 23,971 scholars and 189 Christian schools with 25,619 scholars. The Jewish University at Jerusalem had 657 students.

From 1922 until 1943 the estimated increase in the population was 924,523; the estimated increase among Jews was 419,122, Moslems 439,538 and Christians 59,317. Four-fifths of the increase in the Jewish population was attributable to immigration while the increase in the Moslem population was attributable to the high birth rate. A large proportion of the Palestine Christians are Arabs.

Palestine is the Holy Land for Jew and Christian alike and, to some extent, for the Moslems whose Mosque of Omar stands in Jerusalem. In addition to Jerusalem, historic towns include: Bethlehem, the birthplace of Jesus; Nazareth, in Galilee, His boyhood home; Jericho, famous in both the Old and New Testaments; Hebron, one of the oldest inhabited cities in the world; the ancient town of Beersheba; and Acre, lying at the foot of Mt. Carmel, and Ascalon, on the coast, famous for their part in the Crusades.

Agriculture remains Palestine's chief industry. The maritime plain, the Emek Valley and the northern Jordan Valley are the principal agricultural areas. In 1943 about 110,000 acres were in Jewish possession, of which 44 percent had been purchased by the Jewish National Fund for perpetual lease to Jewish settlers. Most of the Jewish settlements are located in the maritime plain, the plain of Esdraelon and upper and lower Galilee. Citrus cultivation, confined largely to the maritime plain, furnishes the major export crop normally, but the industry was disorganized by World War II with exports dropping from about 15,000,000 cases before 1939 to about 2,425,000 in 1943-44. Olives, cultivated mostly in the hill areas, form the next most important crop with an average annual production of 7,000 tons of oil. Other important crops include rice, fresh fruits and vegetables, figs, tobacco, wheat, barley, maize, sesame and potatoes. Wine production (1943) was 1,135,200 gallons. The dairy industry has made rapid progress in recent years, especially on Jewish farms. Livestock (1943) included 242,945 cattle, 244,162 sheep, 325,376 goats and 29,736 camels.

Palestinian industry has developed substantially during the past 15 years. In addition to the manufacture of consumer goods for home consumption; articles prepared for export include Dead Sea chemicals, artificial teeth and soap. During World War II, Palestine became one of the world's leading diamond cutting centers. Refineries and storage tanks of the Iraq Petroleum Co. are located at Haifa, a terminus of the pipeline from the Iraq oil fields.

The last industrial census (1936) showed 5,602 establishments with 28,670 workers and an output valued at \$42,383,534.

Exports (1945) were estimated at \$44,330,000 and imports at \$112,840,000. In 1941, 42.6 percent of the exports went to Egypt, 10.9 percent to Syria, 9.8 percent to the U. S., and 5.9 percent to Britain; 30.1 percent of the imports came from Britain, 13.1 percent from Egypt, 9.7 percent from the U. S., and 3.3 percent from Syria. Principal exports (excluding petroleum products, Dead Sea chemicals and certain other products) were: edible oils, 7 percent; rice, 4.7 percent; hides, 4.5 percent; and lemons and oranges, 2.4 percent. Major imports were: wheat, 7.8 percent (78,000 tons); cotton piece goods, 5 percent; sugar, 4.2 percent; and cattle, 2.8 percent. Citrus fruits in prewar years accounted for over 75 percent of all exports.

Palestine railways (1942) included 302 miles of broad gauge and 111 miles of narrow gauge (Hejaz railway). All-weather roads (1939) totaled 1,451 miles and seasonal roads 985 miles. In 1942, 1,061 vessels of 1,455,471 net tons entered Palestinian ports. In 1943, 5,659 private cars were licensed and in 1945 there were 22,833 telephone subscribers.

The monetary unit is the Palestinian pound (£P), at par with the pound sterling. Revenue (1943-44) was estimated at \$34,936,000 and expenditures at \$61,223,760. The public debt (1943) was \$14,508,000 and currency in circulation (1944), \$165,230,000. The two major banks are Barclays and the Anglo-Palestinian Bank, Ltd.

Palestine is a mountainous plateau, traversed from north to south by branches of the Lebanon Mountains. The plateau is broken by great depressions running from north to south. The maritime plain is remarkably fertile. The Jordan, the only important river, rises in Mt. Hermon (Syria) and flows south along the trans-Jordan border through Lake Merom and the Sea of Tiberias, or Galilee, into the Dead Sea. Five streams besides the Jordan empty into the Dead Sea, whose surface is 1,300 feet below the level of the Mediterranean.

Mineral resources are limited. The chief minerals of commercial importance are potash (1942: 32,032 tons), gypsum, sulphur, limestone and rock salt. The Dead Sea contains many valuable dissolved salts, and petroleum and bitumen exudations are found around its southern end.

There are few forested areas and wood is a major import (13,161,000 cu. ft. in 1941). The catch of fish (1943) was 3,149 tons, with 530 vessels and 2,250 licensed fishermen, mostly Arabs, engaged in the industry.





Wake I.

DATE LINE
INTERNATIONAL

Midway I.

HAWAIIAN ISLANDS
Kauai
Oahu
Honolulu
Maui
Hawaii

Eniwetok

MARSHALL ISLANDS

Makin
Tarawa
GILBERT ISLANDS

Howland I.
Baker I.

Christmas I.

EQUATOR

PHOENIX ISLANDS

Malden I.
Starbuck I.

SOLOMON ISLANDS
Christobel
SANTA CRUZ ISLANDS

ELLICE ISLANDS

UNION ISLANDS

MARQUESAS ISLANDS

Espirito Santo
NEW HEBRIDES

Vanua Levu
FIJI
Viti Levu
Suva
FIJI ISLANDS

TONGA OR FRIENDLY ISLANDS

SAMOA IS.

SOCIETY ISLANDS

TUAMOTU ARCHIPELAGO

Tahiti

NEW CALEDONIA
Loyalty Is.
Noumea

COOK ISLANDS

TUBUAI ISLANDS

KERMADEC IS.

Tasman Sea

Auckland
NORTH ISLAND
NEW ZEALAND
Wellington
CHRISTCHURCH
SOUTH ISLAND

CHATAM ISLANDS

OCEANIA

Australia, Commonwealth of (Dominion)

Area: 2,974,581 square miles.

Population (est. 1945): 7,343,800.

Density per square mile: 2.4.

Governor General: H. R. H. the Duke of Gloucester.

Prime Minister: Joseph Benedict Chifley.

Principal cities (est. 1943): Sydney, 1,398,000 (seaport, wool market); Melbourne, 1,170,000 (seaport, wool, wheat); Brisbane, 370,500 (seaport, industrial center); Adelaide, 362,500 (seaport); Perth, 263,000 (western seaport); Canberra, 12,200 (capital).

Monetary unit: Australian pound (£A).

Racial stock: European except about 75,000 aboriginals and (1943) 49,849 other non-Europeans (25,143 Asiatic).

Language: English.

Religions (census 1933): Anglican, 38.6%; Roman Catholic, 17.5%; Presbyterian, 10.7%; Methodist, 10.3%; Other Christians, 9.1%.

HISTORY. Lying far from the early navigation routes developed by commerce between Europe and Asia, and separated from other lands except islands inhabited by savages, Australia was the last continent to be discovered. The first to land on the continent were the Dutch who sailed into the Gulf of Carpentaria in 1606. Later in the same year, Luis Vas de Torres, a Spanish captain, sailed through the strait that bears his name and probably touched at several points on the north coast. A Dutch captain, Dirk Hartog, explored the west coast in 1616. General Carpenter sailed around the Gulf of Carpentaria in 1628. In 1642 Abel Tasman sailed from west to east along the southern shore and proved that Australia was not a part of the Antarctic continent. The continent was named New Holland, and so it was called until about 1850.

In 1770 Captain James Cook, after sailing through Cook Strait in New Zealand, sailed to the east coast of New Holland and landed on the bay just south of the present city of Sydney. His account of the country led to its being claimed and settled by Great Britain.

The first settlement, made in 1788 at Botany Bay, was founded as a penal station for criminals from England. Transportation of criminals was virtually suspended in 1839, but Australia had comparatively few white settlers until gold was discovered in Victoria in 1851, after which immigrants poured in. By 1860 all the states (then separate colonies), except Western Australia, had been granted responsible government.

On January 1, 1901 the six Australian states united to form the Commonwealth

of Australia. The Commonwealth supported Great Britain wholeheartedly in World War I, sending 329,883 troops abroad, all volunteers, of whom 59,258 were killed. The financial drain on a nation of less than 6,000,000 was extremely heavy. The Labour party was defeated in the elections of 1919, 1922, and 1925. In February 1923, the wartime premier, W. M. Hughes was succeeded by Stanley M. Bruce, leader of the Liberal wing of the Nationalist party who formed an alliance with Dr. Page, leader of the Country party. Bruce was succeeded in 1929 by the Labour leader, J. H. Scullin, who was replaced in January 1932 by J. A. Lyons, leader of the United Australia party, an amalgamation of several non-Labour interests.

Australia declared war on Germany September 3, 1939 and in 1940-42 Australian troops distinguished themselves in the African, Balkan, Crete and Malayan Campaigns. Country party leader, Arthur William Fadden replaced Robert Gordon Menzies, leader of the United Australia party, as Prime Minister in August 1941 but was displaced by John Curtin with a Labour cabinet in October. With the Japanese invasion of Southeast Asia and New Guinea in late 1941 and early 1942, Australia was threatened with invasion for the first time in 150 years. Australia became a base for U. S. troops and Gen. Douglas MacArthur set up his headquarters there on March 17, 1942. In the general elections held August 21, 1943, Prime Minister Curtin's Labour Government was confirmed in office. Prime Minister Curtin died July 5, 1945 and was succeeded on July 13 by Joseph B. Chifley. H. R. H. the Duke of Gloucester, brother of King George VI, assumed office as governor general January 30, 1945.

GOVERNMENT. Australia, a self-governing member of the British Commonwealth of Nations, is a federal union of six states (New South Wales, Victoria, Queensland, South Australia, Western Australia and Tasmania) and two territories (Northern Territory and Capital Territory). The Constitution is modeled to some extent on that of the United States. Federal legislative power is vested in a Parliament with two houses—the Senate with 36 members (six for each state) and the House of Representatives with 74 members elected on a population basis. Executive power nominally is exercised by the King acting through the Governor General appointed by him but actually the Commonwealth is administered by the Prime Minister and the Executive Council (Cabinet) who are responsible to the House of Representatives and must enjoy its confidence. The House of Representatives continues for three years from the date of its first meeting unless sooner dissolved. Senators are chosen for six years but the Senate may be dissolved

in the event of prolonged disagreement with the House.

Each of the provinces is headed by a governor appointed by the Imperial Government who is advised by the Prime Minister and Executive Council (Cabinet) who actually administer the government. Every province has a bicameral parliament except Queensland (unicameral). The state governments retain the powers not specifically delegated to the federal government. The Northern Territory is administered under the supervision of the federal government.

Federal judicial power is vested in a Federal Supreme Court of six justices appointed by the Governor General in Council. Each state has its own judicial system.

SOCIAL AND ECONOMIC CONDITIONS. Normal primary education is provided free by the states. In 1939 there were 9,940 state schools, average attendance 744,095; 1,863 private schools, average attendance 219,171; 94 technical schools, total enrollment 101,155; 122 business colleges, total enrollment 24,337; 8 universities, total enrollment 14,236. The oldest and best endowed universities are those of Sydney, Melbourne and Adelaide.

Australia is the world's chief producer of wool and sheep farming is the Commonwealth's most important single industry. About 55 per cent of Australia's total area is suitable only for pastoral pursuits. In 1944 there were 123,174,000 sheep, 14,142,400 cattle, 1,746,721 pigs and 1,449,119 horses. The production of wool (1944) amounted to 582,000 tons; estimated butter production (1943-44) was 157,498 tons; cheese 35,853 tons, bacon and hams 45,600 tons. Less than 20 percent of the total area is suitable for agricultural purposes; the total area devoted to crops in 1943 was 17,419,717 acres. The most important crop is wheat; the areas of heaviest production are in South Australia and New South Wales but production in Western Australia is rapidly increasing. Root crops play a smaller part in arable farming than they do in northwest Europe. Sugar and cotton are grown in Queensland and New South Wales, tobacco in northeast Victoria while vines grow chiefly in South Australia and Victoria. The value of pastoral, dairying and agricultural production (1941-42) was \$686,243,000.

Australian industry has made rapid progress since 1915 with the value of industrial output tripling itself between 1915 and 1940. Manufacturing is concentrated in or near the large cities and is mainly concerned with primary production such as the processing of pastoral products, although heavy industrial products are being produced in increasing volume. New South Wales is the leading industrial state. Power for industry is derived almost entirely

from coal. In 1942-43 there were 26,414 industrial establishments employing 759,044 workers with an output valued at \$352,002,056.

Exports (1944-45) were valued at \$273,740,000 and imports, \$256,093,000. Of exports valued at \$478,744,000 in 1939, 50.5 percent went to Britain, 12.1 percent to the U. S., 6.9 percent to France, and 4.5 percent to New Zealand. Of imports valued at \$453,104,000, 39.6 percent came from Britain, 14.3 percent from the U. S., 7.6 percent from Canada, and 7.0 percent from the Netherlands Indies. Leading exports (1939) were wool 31.5 percent (432,000 tons), gold 11.0 percent, butter 9.5 percent (115,000 tons), meat 7.7 percent (254,000 tons), and wheat 6.4 percent (1,894,000 tons). Leading imports (1939) were motor cars and parts 6.7 percent, petroleum 5.5 percent, cotton and linen piece goods 4.8 percent, electrical machinery and appliances 3.6 percent, and paper 2.7 percent.

The principal ports are Sydney (1938-39: 11,600,000 tons entered); Melbourne (8,600,000 tons) and Adelaide (4,900,000 tons). Railway mileage (1943) totaled 27,225, all of which was owned by the state or federal governments. Roads (1941) totaled about 455,000 miles. Civil aviation is under Commonwealth control. In 1943 there were 24,395 route miles open and in 1942-43 7,517,000 miles were flown.

Revenue (actual 1944-45) \$1,098,950,000; (estimated 1945-46) \$1,088,909,000; expenditure (actual 1944-45), ordinary \$478,291,000, defense \$1,471,987,000; (estimated 1945-46), ordinary \$422,400,000, defense \$1,152,000,000. The public debt (June 30, 1944) was \$7,573,945,000.

NATURAL FEATURES. Australia is the smallest continent and the largest island in the world, approximating in size to the United States and being more than three-fourths of the size of Europe and over one-fifth of the area of the British Empire. Much of Australia is an arid plain with neither high mountains nor large forests. The coast line is unusually regular but two great peninsulas jut out toward New Guinea in the north—Cape York Peninsula and Arnhem Land. Between them lies the Gulf of Carpentaria. A wide bay, the Great Australian Bight, cuts into the south coast. Along the east coast ranges of mountains run from north to south, reaching their highest point at Mt. Kosciusko (7,328 ft.). West of the mountains, in the territory covered by New South Wales and southern Queensland, there are three plains, one drained by the Murray and Darling Rivers which flow into the sea southeast of Adelaide, one draining into Lake Eyre, a salt lake 39 feet below sea level, and the third—a tropical plain—surrounding the Gulf of Carpentaria. The western half of the continent is occupied by a desert plateau

which rises into barren, rolling hills near the west coast. It includes the Great Victorian Desert, to the southward, and the Great Sandy Desert to the northward. The island of Tasmania, lying off the south-eastern coast is largely a plateau, cut into plains and valleys by large rivers.

The northern one-third of the country lies within the torrid zone and the remainder, within the south temperate zone. The coolest portion of the mainland (Victoria) is not unlike Spain and south Italy. The average for Australia is a whole 70° and the northern coastal areas average 82°. Large areas of the continent receive less than 10 inches of rain. The eastern highlands and the state of Victoria are the best-watered regions.

Australia possesses considerable mineral resources. The value of mineral output (1942) was \$132,022,000. Most important is gold, with important mines located in every state except South Australia (1943 output: 751,279 fine ounces; 1944, 657,028 ounces). Production was curtailed to some extent during World War II. Second in importance is coal, mined in and near Sydney, near Brisbane and eastern Tasmania (1944 output: 15,075,000 tons). The Broken Hill mine in New South Wales is one of the most valuable silver-lead-zinc areas in the world. Silver-lead ore production (1942) was 289,-198 tons; zinc and concentrates, 315,875 tons; manganese ore, 10,107 tons. Other important minerals include tin (1944: 3,000 metric tons), copper (ore), (31,300 metric tons) and iron ore (1943: 2,250,000 metric tons).

Forest products (1938) were valued at \$31,149,509. Important products included timber (rough sawn) (656,859,000 board feet), eucalyptus oil, sandalwood oil, tan bark and yacca gum.

The fish catch (1938) amounted to 32,150 tons valued at \$5,196,967. Other sea products include bêche-de-mer, oysters, pearls, pearl shell and tortoise shell.

OCEANIA

FIJI—Status: Colony.

Capital: Suva (population 1936: 15,522).

Governor (and British High Commissioner for the Western Pacific): A. W. G. H. Grantham.

Foreign trade (1943): exports, \$7,182,000; imports, \$10,940,000; chief export, raw sugar (75 percent).

Agricultural products: sugar (exports 1943: 104,000 tons), copra, bananas, molasses.

Mineral: gold (1939: 110,000 oz.).

The colony consists of an archipelago of from 200 to 250 islands in the Pacific Ocean about 1800 miles northeast of Sydney, Australia. The larger islands, including Viti Levu (4,011 square miles) and Vanua Levu (2,137 square miles) are mountainous and of volcanic origin. The islands

were ceded to Great Britain by the native ruler in 1874. The governor is assisted by a nominated executive council and by a legislative council, partially nominated and partly elected.

The population (1942) included 109,920 Fijians and 105,581 British Indians. The importation of the latter to work the sugar plantations has led to important social, economic and population changes. There has been almost no intermarriage between Fijians and Indians. A large proportion of the cultivated land is devoted to the production of sugar cane.

Gilbert and Ellice Islands

The islands in these groups (including the Gilbert group; the Ellice group; Ocean Island [the seat of administration], Fanning, Washington and Christmas Islands; and the Phoenix group) were proclaimed a British protectorate in 1892 and annexed in 1915. The colony is administered by the High Commissioner for the Western Pacific through a Resident Commissioner. The most important product is phosphate, produced on Ocean Island (1938: 369,376 tons). Sovereignty over Canton and Enderbury Islands in the Phoenix group was held in abeyance by an Anglo-American agreement signed August 10, 1938. Several of the islands were occupied by Japanese forces during World War II.

Nauru. This small island (5,936 acres) was annexed by Germany in 1888 and placed under joint Australian, New Zealand, and British mandate after World War I. It lies about 2,215 miles northeast of Sydney and to the northeast of the Solomon Islands. Its principal economic activity is the production of phosphates for fertilizer (1940: 1,044,000 tons). Population (1941) was 2,672 including 68 Europeans and 584 Chinese.

NAURU: See also Australia.

NEW GUINEA: See also Australia.

NEW GUINEA, Mandated Territory of—Status: League of Nations mandate.

Area: 93,000 square miles.

Population (1943): 804,000.

Capital: Raboul.

Administrator: Brig. Sir Walter R. McNicoll.

Foreign trade (1940): exports, \$11,210,000; imports, \$3,870,000; chief export, gold.

Agricultural products (1940): coconuts (80,173 tons), cacao, rubber.

Minerals: gold (1940: 278,922 ounces), copper, iron.

The northern section of southeast New Guinea (69,700 square miles) was mandated in 1919 by the League of Nations to the government of the Commonwealth of Australia, together with the Bismarck archipelago (New Britain, New Ireland, and

adjacent islands), the Admiralty Islands and several outlying groups and the northern Solomon Islands (Bougainville and Buka). The administrator advises the governor general of Australia who can legislate by ordinance. Indirect rule by native chiefs has been continued. Japanese landings were effected on New Britain and New Ireland and the Solomons January 23, 1942 and on the northeast coast of New Guinea March 8. Allied forces checked their advance early in 1943; but many of the islands were by-passed in the Allied advance to the Philippines. By May 26, 1945 Australian forces were in control of the entire coast line of British New Guinea and Papua, having sealed the remaining Japanese in the interior. Formal Japanese surrender took place September 6, 1945.

MAJOR AGRICULTURAL CROPS, 1943

Crop	Acreage	Tons
Barley	451,000	196,320
Corn	285,000	195,160
Hay	2,359,000	3,489,920
Oats	1,497,000	335,744
Sugar cane	329,000	5,203,520
Wheat	9,280,000	4,671,840

NEW HEBRIDES: See also France.

Zealand Company was formed the same year and immediately began to send out its first colonists.

New Zealand was granted self-government in 1852, full parliamentary system and ministries in 1856, a constitution in 1870, and dominion status on Sept. 26, 1907. Meanwhile from 1861 to 1871 there was fierce intermittent fighting with the native Maoris. Gold was first discovered in 1853 and a permanent mining field established in 1861.

New Zealand sent troops to help the British in the South African War, 1899-1902, and in World War I. Subsequently New Zealand received from the League of Nations a mandate over Western Samoa and in 1946 when New Zealand offered the mandate to the proposed trusteeship system of the United Nations, the offer was the first act of its kind under the U.N. Charter.

New Zealand's Labor Party came to power in 1935 for the first time when it defeated a coalition government headed by George W. Forbes. Under Michael J. Savage as prime minister, the Labor Party began a program of liberal economic and social measures and it was again successful in the 1938 elections, with the Reform and Liberal Parties remaining as the official opposition.

When Savage died in 1940, he was succeeded by Peter Fraser who formed a special war cabinet in July of that year, New Zealand having joined Britain in the war against the Axis in September of 1939. In World War II New Zealand troops fought in Libya, Greece, Crete, North Africa, Sicily and Italy, and the islands served as a major base for U. S. troops in the Pacific war against the Japanese.

New Zealand is a self-governing dominion of the British Commonwealth of Nations. The British Crown is represented by a Governor-General named by the King after consultation with the New Zealand government. Parliament has two houses—the thirty-six-member Legislative Council named for seven years by the Governor-General with the advice of the Cabinet; and the eighty-member House of Representatives popularly elected for three years. The House elected on Sept. 25, 1943, had forty-five Labor Party members. Executive power is vested in the Cabinet chosen from the members of the majority party in the House and headed by the prime minister. Local government divisions include counties, boroughs, town districts, and many special authorities created for special purposes.

Military service was voluntary until July 22, 1940 when compulsory service was instituted. Service outside the Dominion, hitherto voluntary, also became obligatory during World War II. At full mobilization,

New Zealand (Dominion)

Area: 103,410 square miles.

Population (est. 1945): 1,655,794.

Density per square mile: 16.0.

Governor-General: Lt. Gen. Sir Bernard Freyberg, V.C.

Prime Minister: Peter Fraser.

Principal cities (census 1945): Auckland (greater), 256,426 (seaport and naval base); Wellington (greater), 175,189 (capital); Christchurch, 112,525 (cereals; stockraising); Dunedin, 65,487 (textiles, meat freezing).

Monetary unit: New Zealand pound.

Racial stock (census 1936): European, 94.3%; Maori and half-caste, 5.2%; Others (Chinese, Syrian, etc.), .4%.

Language: English.

Religions (census 1936): Church of England, 39.75%; Presbyterian, 23.44%; Roman Catholic, 13.13%; Methodist, 8.05%; Baptist, 1.57%; Others, 14.05%.

New Zealand, about 1,200 miles east of Australia, consists of two main islands and a number of smaller outlying islands so scattered that they range from the tropical to the antarctic. The islands, which have approximately the area of Italy, were discovered and named New Zealand in 1642 by Abel Jansen Tasman, a Dutch navigator. Captain James Cook explored them in 1769 and after him came many other sailors, sealers, whalers and traders. English missionaries landed in 1814 but made slow progress. On Jan. 22, 1840, to head off a possible French move to claim New Zealand, Britain formally annexed it. The New

New Zealand had 157,000 men in the armed forces and 124,000 in the Home Guard. Almost one-third of the whole male population of military age served overseas. The Air Force participated in the Empire Air Training Scheme and a number of New Zealand squadrons fought with the Royal Air Force as well as in Malaya. Naval forces include 3 cruisers, 4 corvettes and a number of mine sweepers.

State education is free, secular and compulsory between the ages of 7 and 15. Private schools mostly under religious auspices must conform to standards set by the state. About half the Maori attend the regular public schools; the remainder attend native village schools. In 1943, there were 2,230 State elementary schools with 245,592 students and 197 secondary schools with 46,389 students. The University of New Zealand has 6 constituent colleges including agricultural colleges at Lincoln and Palmerston North grouped together as the New Zealand School of Agriculture; university students number 4,373. About 10 percent of the National Budget is expended on education.

New Zealand's very advanced social security system, financed principally by a 5 percent tax on wages, salaries and firm incomes, gives benefits for old age, sickness, unemployment, maternity and hospitalization, widows, orphans, poor families and chronic invalids. It is apropos here to note that New Zealand's death rate is among the world's lowest. Social security fund receipts for the year ending March 31, 1945, were £NZ 18,770,000; expenditures, £NZ 19,332,000.

Primarily a grazing country, New Zealand is one of the world's largest exporters of mutton, lamb, wool, butter and cheese. In 1944 livestock included 33,200,298 sheep, 4,439,258 cattle (36 percent dairy cows) and 225,823 horses. Wool production for 1943-44 was 165,000 tons; butter exports, 206,973,700 pounds; cheese exports, 160,033,000 pounds. Scientific dairy management is well advanced. In 1944 New Zealand had 19,829,999 acres in cultivation, 90 percent of it in sown grasses. Outside of grass, the chief crop is wheat—7,208,485 bushels in 1944. Others are oats, barley, potatoes, onions, tobacco, fruits and vegetables. Total value of 1942-43 agricultural produce was \$550,491,600.

In 1942-43 there were 6,127 factories with 114,590 workers and output valued at \$537,947,433. The chief industries are the freezing of meat, curing of ham and bacon, and making of butter, cheese and condensed milk. Others of major importance are production of heat, light and power, woollen products, saw milling, furniture making and clothing manufacture.

Exports in 1943 totaled £NZ 1,838,940, and imports, including lend-lease receipts,

£NZ 95,148,017. Exported items by percentage were butter, 20; wool, 18.7; frozen lamb, 15.4; cheese, 12.6; hides and skins, 6.1; and canned meat, biscuits and gold. Imported items, excluding lend lease, included by percentage: cotton and linen goods, 5; machinery, other than electrical, 3.4; electrical goods, 2.9; drugs and chemicals, 2.8; silks, 2.1; and paper, sugar and yarn. Both imports and exports are under a rigid system of licensing. In 1942, 74.4 percent of exports went to Britain, 7.3 to the United States, 4.4 to Canada, 4.4 to Egypt, and 3.3 to Australia. Of imports, 35.5 percent came from Britain, 25.9 from the United States, 16.1 from Australia, 3.7 from Canada and 2.3 from India and Ceylon.

The 1944 merchant marine was 455 vessels of 84,159 net tons. Railway mileage in 1944 totaled 3,684, mostly government owned. Highway mileage in 1945 was 58,096. There were 244,753 telephones in 1944.

Governmental revenue for 1944-45 was £NZ 54,248,000, and expenditures, £NZ 53,033,000; both of these figures exclude social security and war taxation. War expenditure account receipts were £NZ 138,981,000 and expenditures, £NZ 130,009,000. The public debt in September, 1945, was £NZ 603,000,000. New Zealand, a member of the sterling bloc, had sterling balances outstanding to her in April of 1946 of an estimated £NZ 73,000,000.

New Zealand's two main components are North and South Island, separated by Cook Strait which varies from sixteen to 190 miles in width. North Island, of 44,281 square miles, is 515 miles long, volcanic in its south central part and containing many hot springs and beautiful geysers. In the southern part of North Island is Lake Taupo, covering 238 square miles in the center of a pumice-covered plateau.

South Island, of 58,092 square miles, has the Southern Alps along its west coast with Mt. Cook at 12,349 feet of elevation, the highest point in New Zealand. Over-all, New Zealand has plains, mountains, valleys, rivers and lakes and a climate ranging from subtropical in the north to mildly temperate in the south.

Principal minerals and 1943 production figures are: coal, 2,737,868 tons; gold, 149,150 ounces; silver, 280,786 ounces; and tungsten, pumice, manganese, silica sand and kauri gum (a fossil resin). About 20 percent of the total area is forested, and 324,473,000 board feet of lumber were cut in 1942.

The flounder, snapper and tarakihi account for 75 percent of New Zealand's fishery industry with 1943 output valued at \$1,882,153. There also are extensive oyster beds. The once important whaling industry declined sharply with development of pelagic whaling, and there is now

only one shore station in commercial operation.

Its many rushing streams give New Zealand a great volume of hydroelectric power. South Island has available about 4,000,000 horsepower, and North Island, 800,000. In 1942 New Zealand ranked sixth among the electrified countries of the world, with about 93 percent of the population having access to power.

Dependencies. The Aucklands, of 234 square miles, and Campbell Island, 44 square miles, are the principal of the outlying islands which have total area of 307 square miles. They are included within the geographical boundaries of New Zealand as proclaimed in 1847 and all are uninhabited. Six hundred miles north of the Aucklands are the volcanic Kermadecs, of 13 square miles, annexed in 1887.

In Polynesia a number of inhabited islands were brought under New Zealand control in 1901. Rarotonga and Mangaia, in the Cook group, total 84 square miles. Niue (or Savage) of 115 square miles, are the largest outside the Cook group. Total population in 1936 was 16,350. New Zealand also administers the Ross Dependency, an antarctic region claimed by Great Britain in 1923 and the Union (or Tokelau) Islands transferred in 1925 from the Gilbert and Ellice Islands colony.

Western Samoa. Area: 1,133 sq. mi. *Population* (1944): 65,643 (white 337; half-caste 3,117). *Status:* League of Nations mandate. *Administrator:* A. C. Turnbull. *Capital:* Apia. *Foreign trade* (1943): exports, £282,991; imports, £605,911. *Principal products:* Copra, cacao beans, bananas, tropical fruits, rubber.

The establishment of a tripartite protectorate over the islands in 1889 by Britain, Germany, and the United States, was followed by Britain's withdrawal in 1900 and the division of the islands between Germany and the United States. New Zealand troops occupied western Samoa in Aug. 1914, and New Zealand received a mandate over the islands in Dec. 17, 1920. The administrator is assisted by a legislative council and a consultative native council. There are 8 islands of which the largest and most populous are Savaii, of 703 square miles, and Upolu, of 430 square miles. They are largely mountainous but fertile. The inhabitants are Polynesians professing Christianity.

THE ROCK FROM DOWN UNDER. New Zealand gave Tom Heeney to the boxing world in the late '20s and early '30s. Although Heeney never did achieve the heavyweight championship of the world, he fought many leading heavyweight fighters of the United States and lost to Gene Tunney in the former's last ring appear-

ance. Heeney was born in Gisborne on May 18, 1898.

NORFOLK ISLAND: See *Australia*.

Outlying Territories

PAPUA (British New Guinea)—Status: Territory under Commonwealth administration.

Area: 90,540 square miles.

Population (1940): 338,822.

Administrator: H. L. Murray.

Capital: Port Moresby.

Foreign trade (1941): exports, \$1,591,000; imports, \$1,740,000; chief exports, rubber, gold.

Agricultural products: coconuts, rubber (1941: 1,000 tons).

Minerals: gold (1938: 33,249 ounces), copper.

Comprising the southeastern corner of the island of New Guinea, with the islands of the d'Entrecasteaux, Louisiade and adjoining groups, Papua was annexed by Queensland in 1883 and by the British Crown in 1888. It came under the control of the Australian Commonwealth in 1901 and became the Territory of Papua in 1906. Japanese forces invaded Papua in early 1942, but with the capture of Buna in December 1942, Australian control was restored. The administrator, appointed by the governor general of Australia, is assisted by a nominated legislative council.

In 1940 there were 1,822 Europeans in the territory. About 280,000 acres of land have been leased, chiefly by planters, and over 62,000 are cultivated. The natives have in large areas settled down to peaceful habits.

Papua (See AUSTRALIA).

Solomon Islands

This protectorate lying east of the island of New Guinea includes the islands of Guadalcanal, Malaita, San Cristoval, New Georgia, Ysabel, Choiseul, Shortland, Mono, Vella Lavella, Ronongo, Rendova, Russell, Florida, Rennell and numerous smaller islands. The islands which came under British protection late in the 19th century were the scene of several important U. S. naval and military victories during World War II. There are no native states and administration is carried on by a Resident Commissioner assisted by a nominated Advisory Council. The most important product is copra.

Tonga (Friendly Islands). This native Polynesian kingdom in the Pacific came under British protection through the terms of the Anglo-German agreement of November 14, 1899. The native queen is advised by a British Agent; the 23-member native Legislative Council is partly elected and partly nominated. The only important products are copra and bananas.

Western Samoa (See NEW ZEALAND).

Bulgaria (Republic)

(Bilgariya)

Area: 42,741 square miles (including southern Dobruja).

Population (est. 1940): 6,735,000.

Density per square mile: 157.5.

Premier: Georgi Dimitrov.

Principal cities (est. 1942): Sofia, 410,000 (capital); (census 1934), Philippopolis (Plovdiv), 99,883 (commercial center); Varna, 69,994 (Black Sea port); Ruschuk, 49,447 (chief Danube port); Burgas, 36,230 (Black Sea port).

Monetary unit: Lev.

Racial stock (1934): Bulgarian, 86.7%; Turkish, 10.1%; Gypsy, 1.3%; Others, 1.9%.

Language: See Racial stock.

Religion: Greek Orthodox, 84.4%; Moham-medan, 13.5%; Jewish, 8%; Roman Catholic, 8%.

Bulgaria, with a strife-ridden political past, is an agrarian country about the size of Virginia. It sided timidly with Germany in World Wars I and II hoping to win territory. Instead, it lost in both wars.

The first Bulgarians were a Tartar tribe that crossed the Danube from the north in 679 A.D., and took the province of Moesia from the Roman Empire. They adopted Slav dialect and customs and twice conquered most of the Balkan peninsula between 893 and 1280. After the Serbs subjected their kingdom in 1330, the Bulgars gradually fell prey to the Turks and from 1396 to 1878, Bulgaria was a Turkish province. In 1878, after the Turks cruelly suppressed a Bulgar revolt, Russia forced Turkey to give the country independence but the Central Powers tempered this to make Bulgaria autonomous under Turkish sovereignty, with the province of Eastern Rumelia under a Turkish governor.

In 1887 Prince Ferdinand of Saxe-Coburg-Gotha was elected ruler and on Oct. 5, 1908 he declared Bulgaria (and Rumelia) an independent kingdom and was proclaimed Tsar of the Bulgarians.

In 1912 in the First Balkan War, Bulgaria joined its neighbor states and defeated Turkey, but then it bickered with Serbia and Greece over division of Macedonia and was beaten by them in the Second Balkan War which lasted one month—July of 1913.

Still coveting Macedonia, Bulgaria joined Germany in World War I and lost. On Oct. 3, 1918, Tsar Ferdinand abdicated for his son who became Tsar Boris III. The Treaty of Neuilly the next year disarmed Bulgaria, reduced it to 1878 size, and levied a heavy indemnity. Internal disorder, underground intrigue and Agrarian-Communist agitation marked the next fifteen years.

WORLD WAR II. Boris assumed dictatorial powers in 1935. When Hitler gave him Southern Dobruja, taken from Ru-

mania, in 1940 the weak but land-hungry Boris joined the Nazis in war the next year and occupied parts of Yugoslavia and Greece. Meanwhile, the Nazis moved in on Bulgaria and with the tide of war swinging inexorably against them, they tried to force Boris to send his troops against the Russians. Boris resisted and died mysteriously on Aug. 28, 1943. Many rumors attributed his death to German poison or bullets.

Simeon II, the infant son of Boris, became the nominal ruler, under a regent, and Bulgaria began to make desperate gestures of friendship for the Allies. Three days after Russia declared war on Bulgaria on Sept. 5, 1944, Bulgaria declared war on Germany. Russian troops streamed in the next day and under an informal armistice a coalition cabinet was set up under Kimon Georgieff.

It soon became apparent that this regime, the Fatherland Front, was Communist dominated, notably by Georgi Dimitrov, a former secretary-general of the Communist International, and a Bulgarian labor leader.

Elections scheduled for Aug. 26, 1945 were postponed as a result of U. S. protest against the "undemocratic" procedure, but were held Nov. 18, 1945, with only one list of candidates—the official Fatherland Front list—being placed before the voters. At the Foreign Ministers' Conference in Moscow in December, 1945, Russia offered to seek the inclusion of two Opposition ministers in the Cabinet, but despite U. S. complaints in February, 1946 the Cabinet contained no Opposition men when reorganized March 31, 1946.

ALLIED CONTROL COMMISSION. Pending signing of the final peace treaty, Bulgaria is under an Allied Control Commission of British, U. S., and Soviet military representatives. The Soviet chairman of the council is also commander of the Soviet occupation troops in Bulgaria. U. S. and British participation is, for the most part, nominal and the country is actually controlled by Soviet military authorities.

Tsar Simeon II (1937—), only son of King Boris III and of Queen Ioanna of Italy, succeeded to the throne Aug. 28, 1943. The first three regents—Prince Kyril, the King's uncle, Prof. Filoff, and Gen. Mikhoff—were executed for Axis collaboration Feb. 2, 1945; they were succeeded by Todor Pavloff, a Communist, Prof. Venelin Ganeff, and Tsverko Bobosheffski. Simeon went into exile when Bulgaria voted to become a republic.

GOVERNMENT. Under the Constitution of 1879, as amended in 1893 and 1911, Bulgaria was a constitutional hereditary monarchy. But the executive power is exercised now by the prime minister and his cabinet. Legislative power is exercised by a unicameral Parliament (Sobranje), whose

number is fixed by the Constitution at 227, but which is now composed of 277 members. The official Fatherland Front list adopted in the elections of November, 1945, consisted of 94 Communists, 94 dissident Agrarians, 46 Zvenoists, 32 dissident Social Democrats and 11 Radicals. In Aug. 1945 the two chief Opposition parties—the Agrarians and Social Democrats—withdrew from the Fatherland Front; those who disapproved of this move organized dissident parties under the same names. The Minister of the Interior appoints the governors of the 7 regional counties and of the districts into which the counties are divided, as well as the mayors of the municipalities. There is a Supreme Court of Cassation at Sofia and 3 regional Courts of Appeal.

DEFENSE. Bulgaria's army, by the Treaty of Neuilly in 1919, was limited to a voluntary force of 20,000 men, but this provision was nullified by a treaty signed with the Balkan Entente in 1938. The peace-time strength of the army became about 60,000. In World War II it rose to about 500,000, in fifteen divisions. It is being organized along Soviet lines by Red Army instructors and the political commissar system has been introduced. The so-called People's Militia, a Communist-run police organization, is controlled by the Minister of the Interior. The number of Russian occupation troops in July, 1946, was unofficially estimated at 150,000.

The Bulgarian peace treaty proposed at the Paris Peace Conference in 1946 would limit Bulgaria to an army of 55,000, a navy of 3,500 and an air force of ninety planes, none of them bombers.

ECONOMIC AND SOCIAL CONDITIONS. Though elementary education is compulsory and free between 7 and 14, the last census, in 1934, showed 20.4 percent of the males and 42.8 percent of the females illiterate. Schools in 1939 included 252 kindergartens, 4,743 primary schools, and 2,044 high schools with a total enrollment of 969,599. One university (Sofia) had an enrollment of 6,030.

Most of the people are Greek Orthodox. Clergy of all faiths are paid by the state. The national language, Bulgarian, is closely related to Russian; both employ the Cyrillic alphabet.

Bulgaria is predominately agrarian with 80 percent of the population engaged in agriculture. Because of the mountainous character of the country, however, only about 43 percent of the land is tilled or used for pasture. Most landholdings are small, and primitive methods of cultivation predominate. More than half the cultivated area is devoted to cereals, including wheat (1939 crop: 2,134,604 tons), corn, barley, oats, and rye. Other crops are tobacco (1939: 38,911 tons), the leading export, and alfalfa, cotton, flax, potatoes,

and sunflower seed. There are extensive vineyards (283,526 acres produced 678,686 tons in 1938) and rose gardens in the southern valleys. Production in silkworm cocoons is highly developed (1938: 2,178,767 kilos). Livestock graze on the mountain slopes. In 1934 Bulgaria had 531,500 horses, 1,497,600 cattle, 8,839,500 sheep, 913,000 goats, 902,000 swine, and 12,772,740 poultry.

Industries of Bulgaria are of minor importance and with three exceptions—preparation of tobacco leaf, distillation of attar of roses, and flour milling—are confined to domestic markets. There were in 1938 a total of 3,089 industrial undertakings, large and small, with 74,305 workers.

Foreign trade necessarily consists of the exchange of agricultural products for cheap manufactures. Exports in 1939 amounted to \$73,450,000, led by leaf tobacco, 41 percent; grapes, 7.6 percent; eggs, 8.4 percent; wheat, 7.3 percent; corn, prunes, swine, and attar of roses. Imports in 1939 were \$62,398,000, led by machinery and parts; wool and wool thread; automobiles and parts, cotton (raw); cotton thread and textiles; iron and manufactures, raw skins, sheet iron, and drugs. Germany received 58.9 percent of the exports and supplied 51.9 percent of the imports; Germany's prewar place in Bulgarian foreign trade has been taken by the Soviet Union.

Although the Danube is navigable for 243 miles on the northern border, only a comparatively small percentage of prewar Danube trade tonnage was Bulgarian. The Bulgarian merchant marine in 1939 consisted of 14 vessels of 17,476 tons. Tonnage entering Black Sea ports, principally Varna and Burgas, totaled 1,776,576; and Danube ports, notably Ruschuk (Russe), 2,429,642. Railroad mileage, all nationalized, totaled 2,211 in 1939; highway mileage was 19,638. Railroads carried 6,083,373 tons of freight in 1938. Telephones in 1943 numbered 35,947.

Governmental revenues in 1939 were \$95,106,472; expenditures \$96,905,706. The total national debt was \$276,905,904, of which \$153,700,701 was external. Foreign investments in Bulgaria prior to World War II amounted to 2,179,000,000 leva, of which about 27.5 percent was Belgian, 23.5 percent Swiss, 11.4 percent French, and 10.9 percent U. S. The already precarious financial position of the government has been made worse by Red Army occupation costs and reparations to Russia.

TOPOGRAPHY. Two mountain ranges and two great valleys mark Bulgaria's topography. The Balkans cross the center of the country, almost due east-west, rising to a peak of 7,800 feet. The Rhodope Range breaks off from the Balkans in the west, curves and then straightens out to run nearly parallel along the southern border.

In between is the valley of the Maritsa, Bulgaria's principal river. Between the Balkans and the Danube, which forms most of the north boundary with Rumania, is the Danubian tableland, cut up by several short rivers. Southern Dobruja, a fertile 2,900 square miles below the Danube delta, is an area of low hills, fens and sandy steppes.

Bulgaria's climate produces cold winters and warm summers approaching the subtropical in the south. Rain and snowfall average twenty to forty inches a year.

Soft coal is Bulgaria's only important mineral and most of the mines are state-owned. The 1939 output was: coal, 187,433 tons; lignite, 2,352,308 tons. Other mine products, some of them increased on Nazi insistence in World War II, include chromite, copper, iron ore, gold, silver, rock salt and manganese ore.

About 30 percent of the country is forested, but a large part is unproductive scrub and most of the valuable woods are virtually inaccessible. Wood imports usually exceed exports. Bulgaria's annual fish catch averages about 3,500 tons.

Chile (Republic)

(República de Chile)

Area: 286,322 square miles.

Population (est. 1944): 5,023,539.

Density per square mile: 18.29.

President: Gabriel Gonzales Videla.

Principal cities (est. 1944): Santiago, 952,075 (capital); Valparaiso, 209,945 (chief port); Concepción, 85,813 (farming center); Viña del Mar, 65,916 (resort center); Talca, 50,964 (farming center).

Monetary unit: Peso.

Racial stock (estimate 1938): White, 30%; Mestizo, 65%; Indian, 5%.

Language: Spanish.

Religion: Roman Catholic.

Chile, rich in minerals, has a relatively tranquil history amid South America's long record of revolution and strife. Its first contact with the white race came in 1535 when Diego de Almagro, an associate of Pizarro, led an unsuccessful invasion from Peru. Pedro de Valdivia founded Santiago in 1540. On Sept. 10, 1810, Chile rebelled against Spanish rule but independence was not won completely until 1817 when Bernardo O'Higgins and José de San Martín finally crushed the Spanish.

Chile, which has never lost a war, fought with Bolivia and Peru in 1879-83 and won the province of Antofagasta, Bolivia's only outlet to the Pacific, as well as extensive acreage from Peru. In World War I Chile was neutral. The overthrow in 1931 of Colonel Carlos Ibáñez, who had seized power in 1927, was followed by a brief

chaotic period in which five presidents tumbled in and out of office, but Dr. Arturo Alessandri, 1932-38, did much to restore Chile's shattered political and economic reputation.

Pedro Aguirre Cerda, victor in the 1938 elections, initiated an extensive socialist program but it was cut off by his death on Nov. 25, 1941. The term of Don Juan Antonio Ríos, elected as Radical candidate of the Popular Front in 1942, was marked by political dissension and labor difficulties. One trouble was the situation brought about by the war. With its minerals inviting booty, and with a 2,600-mile coast line to defend, Chile feared to become an Axis enemy. Under external pressure, and internal pressure notably from its strong Communist party, Chile finally broke relations with the Axis on Jan. 20, 1943, but did not declare war on Japan until Feb. 14, 1945.

Meanwhile, well before he died on June 27, 1946, Ríos was forced by serious illness to turn over his powers to Alfredo Duhalde, Senate president. Chile has no vice president. As a result of the special election of Sept. 4, 1946, Gabriel Gonzales Videla became president.

The nation elects a president every six years, a Senate of forty-five members every eight years, and a Chamber of Deputies of 147 members every four years. The president is assisted by a nine-man cabinet responsible to him but subject to impeachment by Congress, which also may override a presidential veto by two-thirds vote. All literate male citizens over twenty-one vote in elections. The president names the administrators of the twenty-five provinces. There is a supreme court in Santiago and eight appeals courts.

Military service is compulsory beginning at twenty with an initial training period of nine months, after which a civilian is on reserve until forty-five. In 1943 the army numbered 725,000. In 1945, about 30 percent of the Chilean budget went to the military. The navy, normally 8,000 men strong, had at the start of 1946 one old battleship of 28,000 tons, two old cruisers, eight destroyers, nine submarines, two coast defense craft and a sloop. The air force, with 200 planes and 3,000 men in 1940, expanded greatly in World War II. Under a 1945 agreement, Chilean forces were to be advised by a U. S. naval and military mission.

Education, free and compulsory between seven and fifteen, is directed by the central government, and in 1943 illiteracy was estimated at 24 percent, third lowest in Latin America. School enrollment in 1943 was 576,900 in 5,364 primary schools, 87,265 in 418 intermediate schools, and 6,402 in five universities, including the State University of Chile founded in 1842. About 20 percent of the 1945 budget went for education.

Chile's population increased 17 percent from 1930 to 1940. The base of the white population is Spanish, though there are some German, English, Irish and Scotch. Roman Catholicism is the dominant religion, but church and state separated in 1925. At the last Papal consistory, the Archbishop of Santiago was created a cardinal.

Chilean agriculture is mostly confined to its temperate central valley, similar to that of California. The available productive land—60,219,583 acres in 1936—is less than 4 percent of the country and most of it must be irrigated. Wheat is the leading crop, followed by potatoes, oats, barley, corn, string beans and fruits. Grapes, next to wheat in acreage, produced 100,000,000 gallons of wine in 1945. Feudal-type estates, averaging 2,500 acres, predominate. Cattle in 1942 totaled 2,346,384. Sheep in 1936 totaled 5,749,069; horses, 527,827; asses and mules, 93,525; and swine, 571,495. The livestock industry does not supply local needs, but wool is used in Chilean textile mills and wool and hides are exported.

Already enjoying a favorable balance in foreign trade, Chile quadrupled it to \$130,000,000 during World War II. Imports in 1944 totaled \$149,092,000 against exports of \$197,746,000. Copper, nitrate and iodine make up 70 percent of exports, followed by wool, hemp, legumes, rice and sheep skins. By value, the United States took 64 percent of exports; Argentina, 8 percent; Brazil, 4 percent; Peru, 2 percent, and Britain, 1 percent. By value, the United States supplied 43 percent of imports; Argentina and Peru, 17 percent each; Brazil, 10 percent, and Britain, 6 percent.

Although Chile dreams of great industrial development, and has all the raw materials except coal and tin, progress continues slowly. Except for mineral processing, most manufacturing is of low-priced consumer goods, particularly textiles. In 1940 there were 4,034 factories with 123,091 workers.

Highway mileage totals 28,125, about 35 percent improved. Rail mileage is 5,407, partly electrified. Chile has ninety-two airports serving three major lines. The 1940 merchant marine totaled 106 vessels of 160,232 gross tons, and the 1942 tonnage carried was 1,631,000, much of it coastwise. Telephones in 1942 numbered 96,642.

Deficit financing continues to be a serious problem. The 1945 budget was 4,749,036,000 pesos, with an accumulated deficit of 562,000,000 pesos. The 1945 national debt was 5,936,100,000 pesos. U. S. investments in 1942, mostly in mining and manufacturing, were \$413,983,000. British investments were estimated at £50,114,361.

A long mountainous land, Chile, 2,661 miles in length and varying from 250 to 46 miles in width, is one-third covered by the

towering barrier ranges of the Andes. Seventeen of South America's forty-one tallest peaks, all over 20,000 feet, lie wholly or partly in Chile. In the north is the mineral-rich Atacama Desert, between the coast mountains and the Andes. In the center is a 700-mile-long valley, thickly populated, between the Andes and the coast plateau. In the south, the Andes border on the ocean.

At the southern tip of Chile's mainland is Punta Arenas (Magallanes), the southernmost city in the world, and beyond that lies the Strait of Magellan and Tierra del Fuego, the island divided between Chile and Argentina. Chile's short rivers are useful only for irrigation and as electric power sources. While the country has few good harbors, it has many ports, at most of which tonnage must be loaded or unloaded by lighters. In the south Chile's rainfall is extremely heavy, in the north, almost nonexistent.

The basis of the country's economy is its mineral resources in the northern desert provinces of Atacama and Tarapaca. There is found the only natural nitrate in the world. More than 60 percent of the world's iodine is obtained as a by-product of nitrate processing. Chile's world monopoly in nitrate, however, is not what it used to be before the discovery of the synthetic product.

The world's largest copper reserve, estimated at 134 billion pounds, is in Chile, and also more than 900 million tons of high grade iron ore. The reserve of Chilean coal, noted for quantity rather than quality, exceeds two billion metric tons.

Mineral production for 1944 shows: coal—2,300,000 metric tons; iron ore—670,000 metric tons; and copper—487,600 metric tons. Figures for 1943 show silver—1,090,000 ounces; mercury—19,000 pounds; manganese ore—114,100 metric tons; and gold—270,000 ounces. Nitrate production in 1942 was 1,559,034 short tons. Cobalt, zinc, tungsten and molybdenum also are produced.

Forests estimated to cover 40 to 50 million acres in the southern provinces yield a variety of commercial wood including conifer, laurel and magnolia. Timber production in 1941 came to 273,981,750 board feet. Chile's annual 40,000 tons of sea food includes cod, eel, oysters, sawfish, sardines and tuna.

Subsidies were provided for national vessels using the Panama Canal and the Strait of Magellan and other measures adopted to stimulate a commercial marine. Shipping reported for 1938 was 99 craft with a tonnage of 16,422. In 1936, 369 vessels cleared at Chilean ports while the coastal shipping amounted to 1,702,400 tons. The postoffices in 1936 numbered 1,038, and handled 92,130,893 pieces of mail.

China (Republic)

(Chung-Hua Min-Kuo)

*Area: 3,858,900 square miles.

*Population (est. 1945): 461,000,000.

Density per square mile: 119.2.

President: Chiang Kai-shek.

Premier: T. V. Soong.

Principal cities (est. 1945): Shanghai, 3,726,757 (chief port, industrial and financial center); Peiping, 1,550,561 (political, educational center); Tientsin, 1,217,646 (commercial center); Canton, 1,115,000 (southern seaport); Chungking, 1,037,630 (wartime capital); Nanking, 1,019,148 (capital).

Monetary unit: Chinese dollar.

Racial stock: Chinese.

Language: Chinese.

Religions: Confucianism, Buddhism, Taoism, Mohammedanism, Christianity.

*Including Formosa and Manchuria; excluding Outer Mongolia.

HISTORY. China, second in size and first in population among the countries of the world, was the first victim of the aggressions that led to World War II. Japan seized Manchuria in 1931-32 and invaded China proper in 1936. In the years that followed, China suffered untold destruction and lost millions of lives through enemy action or starvation. Ancient and wise but backward, China was not only fighting a powerful enemy. It was also torn by internal dissensions between the Chiang Kai-shek government and the Communists of the north. When 1945 finally brought victory, China still suffered cruelly. The war's wake brought on new famines and a renewal of the old internal struggle. In 1946 the central government and the Communists still fought a bloody civil war that raged sporadically, despite U. S. efforts to bring the sides together in peace.

Chinese recorded history is among the world's oldest. By 2000 B. C. Chinese were living in the Yellow River basin and they had achieved an advanced stage of civilization by 1200 B. C. The great philosophers, Lao-tse, Confucius, Mo Ti, and Mencius lived during the Chou dynasty from 1122 to 249 B. C. The warring feudal states were first united under Emperor Shih Huang Ti who began the Great Wall. Under the Han dynasty, from 206 B. C. to 22 A. D., China prospered and opened trade with the West.

The Mings, the last of the native rulers (A. D. 1368-1644), overthrew the Mongol or Yuan dynasty (1279-1368) established by Kublai Khan whose dominions extended into eastern Europe. The weakening Mings in turn were overthrown in 1664 by invaders from the north, the Manchus. The Chinese closely restricted foreign activities and by the end of the 18th century only Canton (and the Portuguese port of Macao) were open to European merchants. Following the Anglo-

Chinese war of 1840-42, however, numerous treaty ports were opened and Hong Kong was ceded to Britain. Treaties signed after further hostilities (1856-60) weakened Chinese sovereignty, removed foreigners from Chinese jurisdiction and legalized opium trade. The disastrous Sino-Japanese War (1894-95) was followed by a scramble for Chinese leases and concessions by European powers which resulted in the nationalist Boxer Rebellion (1900), suppressed by an international force. The death of the Empress Dowager Tsu Hsi and the accession of the infant emperor Hsuan T'ang were followed by a nationwide rebellion led by Dr. Sun Yat-sen who became first President of the Provisional Chinese Republic in 1911. The Manchus formally abdicated on Feb. 12, 1912. Dr. Sun resigned in favor of Yuan Shih-kai who suppressed the republicans but was forced to abandon his intention of declaring himself Emperor by a serious rising in 1915. Yuan's death in 1916 was followed by years of civil war between rival militarists and Sun's republicans. The death in 1925 of Dr. Sun, who had controlled only the Canton area in opposition to the recognized regime, was followed by a revival of the Kuomintang which practically defied him. Nationalist forces led by Gen. Chiang Kai-shek and advised by Soviet experts soon occupied most of China, setting up a Kuomintang regime in 1928. Internal strife continued, however, both with other warlords and with the Chinese Communists. Soviet advisers were ousted. An alleged explosion on the South Manchurian Railway on Sept. 18, 1931, brought invasion of Manchuria by Japanese forces, who installed the last Manchu emperor, Henry Pu-Yi as nominal ruler of the puppet state of Manchukuo. Japanese efforts to take China's five northern provinces in July, 1937, were resisted by Chiang Kai-shek who had succeeded in uniting most of China behind him. Within two years Japan seized most of the ports and railways. The Kuomintang government retreated first to Hankow and then to Chungking while in "Occupied China" the Japanese set up a puppet government at Nanking headed by Wang Ch'ing-wei. In 1943 Chiang became political as well as military leader of "Free China."

When the Japanese surrendered in 1945 a treaty was signed with the Soviet union providing for Soviet withdrawal from Manchuria, joint Soviet-Chinese control of Manchurian railways, a joint Chinese-Soviet naval base at Port Arthur and a free port at Dairen. The surrender touched off a race between Nationalist and Communist forces to control important centers in North China and Manchuria. Agreement was reached for the establishment of a Political Consultative Council representing all groups on Oct. 10, but fighting again broke out early in 1946.

with the Communists controlling northern and central Manchuria and much of north China.

GOVERNMENT. NATIONAL. The National Government is based on a law promulgated by the Kuomintang on Oct. 4, 1928, and revised in 1931, 1932, and 1943. The highest state organ is the 30-member State Council whose chairman is President of the National Government. Under the State Council are five Yüan—the Executive Yüan (Cabinet), the highest executive organ of the state; the Legislative Yüan, whose members are nominated by the Government; the Judicial Yüan; the Examination Yüan which controls the civil service; and the Censor or Control Yüan which is responsible for the impeachment of Government officials and the auditing of Government accounts. The advisory People's Political Council, consisting of 240 members appointed by the Kuomintang, is a semi-legislative assembly acting until the formal election of a National Congress.

DEFENSE. Military service is compulsory; the initial training period is one or two years. General Chiang is supreme commander of all forces. Until the spring of 1945 China maintained a nominal strength of more than 300 divisions totaling 5,000,000 men. Then, a reorganization disbanded units of about 1,700,000 men, and modernized a number of others with U. S. weapons. The navy, on Dec. 31, 1945, had sixteen gunboats and several small Japanese warships.

The separate Communist armies, in Manchuria and north China, number about 1,000,000 men equipped with considerable captured Japanese materiel. The Communists have about 2,000,000 men in irregular forces.

SOCIAL AND ECONOMIC CONDITIONS.

EDUCATION. Recent years have seen marked progress toward mass education for men and women. Excluding schools in former occupied areas, there were in July, 1945, 145 institutions of higher learning with an enrollment of 73,667; 3,455 secondary schools with an enrollment of 1,101,087 and 265,417 primary schools with about 18,000,000 pupils. Many of the schools were being moved back in 1946 to their original campuses. Education is nominally compulsory from 6 to 12. The mass education and literacy movement has been accompanied by the replacement of the old classical or "dead" Chinese language with the popular vernacular (Pai-hua) of the Mandarin dialect, employing perhaps 1,000 of the most essential of the many thousands of Chinese ideographs.

POPULATION AND RELIGION. Estimates of China's population vary and are only calculated guesses. The population is quite unevenly distributed with most of it in the following five areas: the central portion of the northern plain (Shantung);

the Yangtze delta, a coastal belt extending southward from the Yangtze delta to the Canton delta; the Hupeh basin centered around Hankow; and the isolated Red basin of Szechwan, far to the west. Most Chinese who are not Christians or Moslems practice all three of the native religions—Confucianism, Buddhism and Taoism. Almost 10 percent of the population is estimated to be Moslem; there are also many Roman Catholics and Protestants.

AGRICULTURE. China is essentially agricultural, with nearly 80 percent of the population dependent on the land for livelihood. Subsistence crops are necessarily emphasized but China is not self-sufficient in food. Cultivation is intensive, holdings are small, and irrigation is widely practiced. The three most important food crops—rice, wheat and millet—occupy about 69 percent of the cultivated area. The range of crops is wide. In the north, wheat, barley, corn, sorghum, millet and other cereals and beans and peas predominate whereas in the south, rice, sugar and indigo are most important. The Yangtze basin, one of the most favored agricultural regions in the world, is China's premier granary. Tea, the chief beverage, is grown mainly on the central uplands and coastal ranges.

Silkworm culture, practiced widely and especially in the lower Yangtze Valley, yields over 200,000 tons of cocoons a year. Cotton, the major purely industrial crop, runs from 2,500,000 to 4,000,000 bales a year. Soybeans are of ever-increasing importance. Other crops include fibers, tobacco, groundnuts, and many medicinal plants and spices.

AGRICULTURAL CROPS, 1941

Crop	Tons
Rice	37,696,830
Ramie	15,267,990
Wheat	9,098,112
Barley	4,066,215
Corn	3,665,968
Beans	2,309,021
Peas	2,068,895
Soya Beans	1,912,741
Millet	1,697,851
Groundnuts	1,258,925
Cotton	296,493
Silk (1939, exports only)	5,193

The urgent need for subsistence crops confines grazing grounds for sheep and cattle to the dry northwest and to mountain pastures. However, such animals as goats, poultry and especially pigs are raised everywhere and pigs' bristles and eggs are important exports. In 1941, livestock in 22 of the 24 provinces of China proper was estimated as follows: Poultry, 168,593,000; swine, 37,740,000; cattle, 12,-

727,000; buffaloes, 8,079,000; goats, 7,171,000; sheep, 4,210,000.

INDUSTRY. Industrially, China is still backward. Factory development has been mainly in the manufacture of cottons. There are also silk and flour mills, match factories, tanneries and some steel and cement mills. The production of consumers' goods far exceeds that of producers' goods, which must still be imported. Much of the industry which had been developed in the lower Yangtze Valley and the Shanghai area was moved westward in 1938 and 1939.

TRADE. Excluding goods exchanged under barter arrangements, exports in 1944 were Ch.\$789,907,846 and imports, Ch.\$3,494,918,980. Principal imports were dyes, pigments, paints, varnishes, paper, printed material, raw cotton, yarn and thread, chemicals, and metals and ores. Principal exports were textile fibers, animals and animal products, spices, and stone, earth and sand.

COMMUNICATIONS. Exploitation of many of China's natural resources has been handicapped by the lack of internal communications. There is an extensive system of inland waterways and canals, however, and in central and south China most of the trade is carried on by water. The Yangtze is navigable for ocean vessels in the summer as far as Hankow (595 miles). Chungking, 1,427 miles from the sea, can be reached by special steamers. The modern highway system now totals about 80,000 miles. The railway system, totaling about 13,000 miles, is concentrated in north China and Manchuria and in the lower Yangtze basin. The principal north-south artery is the Peiping-Hankow line connecting at Hankow with the Hankow-Canton line. The principal port, Shanghai, at the mouth of the Yangtze, accounted for 50 percent of the total maritime customs revenue in 1939 and is the major port of the Far East.

FINANCE. The budget in 1945 was estimated about Ch.\$200,000,000,000, 190 times larger than that of the year 1937; actual expenditures were even greater. Only about 45 percent of the budget could be met by taxation. From 1938 to Aug. 1945, the Soviet Union, Britain and the United States extended loans to China totaling £58,047,000 and \$870,000,000. In addition, lend-lease assistance from March 11, 1941 to Dec. 31, 1945 amounted to \$1,335,632,000. From V-J-Day until Feb. 28, 1946, assistance totaled \$602,045,000.

NATURAL FEATURES AND RESOURCES.
TOPOGRAPHY. China has about twice the area of the continent of Europe and about $1\frac{1}{4}$ times the area of the continental United States. Its coast line is roughly a semi-circle, about 2,150 miles long. The greater part of the country is mountainous and only in the lower reaches of the

Yellow and Yangtze Rivers are there extensive low plains. The principal mountain ranges are the Tianshan chain, to the northeast; the Kunlun chain, which attains a height of 20,000 feet, running south of the Takla-Makan and Gobi Deserts; and the Trans-Himalaya, which connects the Kunlun with the borders of China and Tibet. Manchuria is largely an undulating plain connected with the north China plain by a narrow lowland corridor. The four provinces of Inner Mongolia contain the relatively fertile southern and eastern portions of the Gobi. The large island of Hainan (13,500 square miles) lies off the southwestern coast.

HYDROGRAPHY. China proper consists of three great river systems. The northern part of the country is drained by the Hwang Ho (Yellow), 2,700 miles long and mostly unnavigable. The central part is drained by the Yangtze, the sixth longest river in the world (3,200 miles). The Si-Kiang in the south is about 1,250 miles long and navigable for a considerable distance. In addition, the Amur forms the northeastern boundary for 1,500 miles.

CLIMATE. There are great diversities of climate. North China has the coldest winters in the world for its latitude. The Yangtze Valley is warmer, with winter temperatures more like those of Britain, while the south has warm subtropical winters. Summer temperatures are uniformly hot throughout China. South China receives regular rainfall averaging from 40 to 60 inches but in the north rainfall is irregular and not as heavy, and neither droughts nor floods are uncommon.

Iron ore, far less plentiful than coal, is mined principally in the lower Yangtze Valley. Tin, mined in Yunnan and southwest Szechwan, is the major export mineral. Of some rarer minerals, notably antimony and tungsten, China is normally the world's leading producer. Lead, zinc, silver, mercury and gold are also mined.

LEADING MINERALS OF CHINA, 1940

Mineral	Amount
Coal	19,652,907 tons
Salt	3,306,900 "
Tin	11,200 "
Antimony	6,042 "
Tungsten	3,430 "
Mercury	237 "
Bismuth Ore	20 "
Gold	478,188 Fine ounces

FORESTS, FISHERIES. China urgently needs reforestation. Most forests left are on less accessible mountain slopes. Bamboo is cultivated in groves throughout China south of the Tsinling. Both sea and river fisheries are rich and varied, and fresh or salted fish is a staple food in many districts. The coastal fisheries of Shantung, Chekiang and Kwantung are especially valuable.

Chinese Outer Territories

MANCHURIA. *Status:* Integral part of Republic of China, partially occupied by Chinese Communist forces. *Area:* 503,143 square miles. *Population* (est. 1940): 43,-233,954. *Foreign trade* (1939): exports, \$206,399,000 (62.5 percent to Japan); imports, \$362,679,000 (84.8 percent from Japan); chief exports, soya beans 32.3 percent, bean cake 9.7 percent, coal 3.9 percent, millet, sorghum, corn. *Agricultural crops* (1939, in tons): soya beans, 4,360,699; sorghum, 5,091,524; millet, 3,887,812; wheat, 1,046,083; corn, 2,716,067. *Industries:* Iron and steel, machinery, textiles, food processing, chemical. *Minerals:* coal (1939: 19,000,000 tons), iron ore (1936: 2,131,848 tons), gold, lead ore, manganese ore.

Manchuria includes the three northeastern provinces of China—Fengtien, Kirin, and Heilungkiang, which before the Japanese invasion of 1931 were governed apart from China proper. A separate state (Manchukuo) was set up under Japanese sponsorship (Feb. 18, 1932) which finally assumed the form of an empire with Henry Pu-Yi, last Manchu emperor of China, installed as emperor (Mar. 1934). It was never recognized by China, the United States, or Britain. The regime was a transparent screen for Japanese control exercised by the Kwantung army. The Japanese hold on Manchuria was broken when it was invaded by the Red Army in August 1945. The decision reached at the Cairo conference (1943) that Manchuria should revert to Chinese possession was confirmed by the Sino-Soviet treaty signed Aug. 14, 1945. The treaty provided for Chinese control of Manchuria, but made important economic concessions to the Soviet Union. The extensive Manchurian railway network was to be under joint Soviet-Chinese control for 30 years, Port Arthur was to be a joint Sino-Soviet naval base, and Dairen was to be a free port. Soon after the Japanese surrender, Chinese communist troops moved into the country and continued to control most of northern and central Manchuria after the Soviet evacuation.

As a result of extensive Japanese development, Manchuria is probably the richest industrial area in China, containing about two-thirds of her heavy industry and half her railway mileage.

Manchuria is also a rich agricultural region with a cultivable area estimated at 57,300,000 acres. The principal commercial crops are the soya beans and wheat. Rice and cotton are also grown. There are good grazing lands; in 1937 there were 1,683,000 cattle, 2,000,000 sheep, 1,250,000 goats, 2,000,000 horses, and 5,335,700 swine. Lumber from the forests of the East Manchurian Highlands supplies the needs not only of the Manchurian plain but also of North China.

FORMOSA (TAIWAN). *Status:* Part of Republic of China. *Area:* 13,429 square miles. *Population* (1940): 5,872,084. *Capital:* Taihoku (pop. 1940: 326,407). *Foreign trade* (1939): exports, \$153,944,000 (82.9 percent to Japan); imports, \$106,097,000 (83.4 percent from Japan); chief exports, sugar, 43.8 percent (1,446,000 tons); rice, 21.7 percent (626,000 tons); bananas, 2.9 percent; canned pineapple, 2.3 percent; camphor, 1 percent (675 tons). *Agricultural products* (1938, in tons): sugar cane, 9,737,571; rice, 1,481,836; sweet potatoes, 1,902,805; bananas, 222,283; pineapples, 76,721; tea, 14,443. *Industries:* sugar refining, canning, chemical, wood and paper. *Minerals* (1936, in tons): coal, 1,922,411; gold-silver-copper ore, 218,614; gold, 43,-740 ounces; petroleum, silver, sulphur. *Forest products:* timber, camphor, bamboo.

Formosa is a large island in the western Pacific, separated from China to the west by the Taiwan straits (narrowest point, 90 miles).

THE PESCADORES (BOKOTO) (about 50 square miles) and other outlying islands are administratively a part of Formosa. The island, ceded to Japan in 1895 after the Sino-Japanese War, remained Japanese until restored to China in 1945.

Most of the inhabitants are of Chinese stock. There are also about 150,000 aboriginal tribesmen in the mountainous interior and (in 1940) 308,845 Japanese. Sugar cane, grown under the plantation system, is the most prosperous of the island's developments. Formosa is one of the world's chief sources of camphor and there were government monopolies of camphor, salt, opium and tobacco. Total value of manufactures in 1938 was \$108,-085,349. Forest resources are enormous. Railway mileage (1939) totaled 2,463 and roads, 11,300.

TIBET. *Status:* Under nominal Chinese suzerainty but politically independent. *Area:* 469,294 square miles. *Population* (est. 1936): 3,722,000. *Capital:* Lhasa (est. 20,000). *Ruler:* The 14th Dalai Lama (Lingh Lamutanchu). *Foreign trade:* No data available; exports, wool, live animals, salt, hides, borax, tea, musk. *Agricultural products:* barley, fruits, pulse, vegetables. *Minerals:* borax, salt, coal, gold.

Tibet, north and northwest of the Himalayas, is the highest country in the world, averaging 16,000 feet in elevation. It has many peaks ranging from 20,000 to 24,600 feet high. Chinese suzerainty over Tibet was established in the 18th century. The area was invaded by a British expeditionary force in 1904, but the Anglo-Russian Convention of 1907 recognized China's influence and stipulated that neither Russia nor Britain should interfere in Tibet's affairs.

Chinese representatives were expelled in 1912, but in recent years Sino-Tibetan relations have improved, and early in 1944 a delegation of 20 Lamaists visited Chungking and greeted Chiang Kai-shek as "our supreme leader." The government is a theocracy, ruled by the Dalai Lama who acts through a regent or minister appointed from among the chief lamas.

The religion and the predominant factor in Tibet's social system is Lamalism, a late form of Buddhism modified by animism and primitive magic. Education is in the control of the many monasteries, some of which have over 1,000 monks. A large number of the population are lamas, mostly celibates. Both polyandry and polygamy are practiced. Some agriculture and herding is possible in the valleys.

SINKIANG (CHINESE TURKESTAN). *Status:* Chinese province. *Area:* 705,769 square miles. *Population* (est. 1936): 4,360,020. *Capital:* Urumchi (Tihwa) (50,000). *Governor:* Gen. Chang Chih-chung. *Foreign trade:* No data available; chief exports, wool, cotton, furs, skins, sheep, cattle and horses. *Agricultural crops:* wheat, corn, rice, cotton, sorghum, beans, fruit. *Minerals:* jade, gold.

Largest and most remote of China's provinces, Sinkiang experienced violent Mohammedan uprisings after 1932. The Chinese governor, Gen. Shen Shih-tsai, re-established order in 1937 with Soviet support. In 1943 Russian troops withdrew, taking with them all their economic installations. A revolt of the Turki tribes who had set up an "East Turkestan Republican Government" was ended June 8, 1946 with the signing of an agreement whereby Chinese troops were to garrison the borders but Turki regiments were to garrison Inning, Tahcheng and Chengwa.

Chinese constitute about 10 percent of the population; there are 14 other ethnic groups, mostly Turki tribes of the Sunni Moslem faith. The Mongol tribes are Buddhists. There are vast stretches of desert and arid land and the limited area under cultivation is mostly in oases and river valleys. The northern slopes of the Tien-shan Range, which divides the province from east to west, provide rich summer grazing lands. There were (1942) 12,000,000 sheep, 2,000,000 horses, 1,300,000 goats, 1,300,000 cattle and 500,000 camels. Almost all of the limited foreign trade is conducted with Russia. Some caravan trade is carried on over the high passes which separate Sinkiang from India. There are no railroads, but 2,440 miles of road were built during 1932-42. An air route from Chungking to Moscow crosses the provinces with stops at Urumchi and Hami. The largest towns are Kashgar (80,000) and Yarkand (75,000), both near the western border.

Colombia (Republic)

(La República de Colombia)

Area: 439,714 square miles.

Population (est. 1946): 9,882,860.

Density per square mile: 22.4.

President: Mariano Ospina Perez.

Principal cities (census 1942): Bogotá, 395,300 (capital); Medellín, 198,100 (mining); Barranquilla, 183,500 (chief port); Cali, 121,300 (coffee, mining).

Monetary unit: Peso.

Racial stock: Mestizo, 68%; White, 20%; Indian, 7%; Negro, 5%.

Language: Spanish.

Religion: Roman Catholic.

Colombia, nearly nine times the size of New York State and the fourth largest of South American nations, is second only to Brazil in world coffee production and is the only country on its continent with frontage both on the Pacific and the Caribbean. Its northern coast was one of the first parts of the Americas to be visited by the Spanish explorers. Darien, the first permanent European settlement in the New World, was founded in 1510; Santa Marta, in 1525; and Bogotá, in 1538. New Granada, as Colombia was called until 1861, was comparatively neglected during the Spanish colonial era. After winning independence from Spain in a fourteen-year struggle ending in 1824, the country set up as a republic in 1831, including the area that now is Panama. Intermittent civil war bedeviled Colombia from then until 1903 when Panama seceded with United States backing. Since then, there have been no serious revolutions. The 100-year-old boundary dispute with Peru over Leticia almost led to war in 1931, but a settlement was arranged through the League of Nations.

The administration of Dr. Alfonso Lopez Pumarejo, Liberal president in 1934-38, produced labor reforms and the removal of state protection for the Roman Catholic Church. After an intervening Conservative regime, Dr. Lopez won again in 1942 but resigned on Aug. 7, 1945, ostensibly because of Liberal Party dissension. The provisional president, Alberto Lleras Camargo, was another Liberal, but when another Liberal split arose in the elections of May 5, 1946, Mariano Ospina Perez, a Conservative, won. The Congress remained Liberal, however.

Colombia's president, who appoints his own cabinet, is elected every four years. The Senate—the upper house of Congress—is elected for four years by the local assemblies of Colombia's fourteen departments. The House of Representatives is directly elected for two years. The president names the departmental governors and the officials of the four intendencias and six commissaries. All male citizens

over twenty-one have the vote. The judicial power is vested in the twelve-member Supreme Court in Bogota, and there is a Superior Court in each judicial district.

A term of military service is compulsory for men between twenty-one and thirty. Colombia's army in 1940 had 14,700 men, an air force of 1,150 and total army reserves of 100,000. With 1,500 personnel, the navy has two modern destroyers, three sea-going gunboats, three patrol craft, four river gunboats and several motor launches. U. S. lend-lease military goods received in 1942-45 totaled \$6,566,951, including 113 planes, and various weapons and vehicles. Under a 1946 arrangement, fifty young Colombian officers were sent to the United States for air training.

Primary education is free but not compulsory in Colombia, whose last published illiteracy figure was 48.5 percent in 1928. By law 10 percent of the national budget goes for education. The 1943-44 school enrollment was 296,901, including 138,012 in 1,986 elementary schools and 44,594 in 327 high schools. Aside from the National University, founded at Bogotá in 1572, there are four departmental universities and several private ones.

Because of the former isolation of the interior, the language and manners in Bogotá are more purely Castilian than anywhere else in South America. While the white race retains its social and economic dominance over Indians and Negroes, race mixture is steadily reducing its numbers. In 1938 there were 34,322 foreigners in Colombia. In recent years, notably by the new labor code of 1944, laboring classes have made important gains including minimum wages, vacations and holidays, accident and sickness benefits, and the protected right of union organization.

Most of the people live by farming and cattle herding, but only a small part of the land is cultivated, and that by primitive means. Colombia's coffee, by far its principal crop, is a mild variety that does not compete with Brazilian types. Production in 1945-46 was 5,365,000 bags of 132 pounds each. Other crops include bananas, coconuts, tobacco, sugar cane, corn, cotton, cocoa, beans, rice, tropical fruits and, in the temperate regions on plateaus and in mountain valleys, cereals and potatoes. Cattle in 1945 were estimated at 12,334,000 head, and some enterprising herdsmen were flying purebreds from the United States to improve their stock.

In 1941, textiles, tobacco products, beverages and other output of Colombia's 1,569 factories totaled more than 225 million pesos. To protect trade balances, exports and imports are state-controlled. Imports in 1943 were 146,692,018 pesos

against exports of 218,526,880 pesos. Coffee accounted for 80 percent of export value, followed by oil, platinum and gold. The United States took 84 percent of exports and Canada, 5 percent. Import sources by percentage were: United States, 61; Brazil, 10; Argentina, 9; and Britain, 5.

Difficult terrain makes Colombia's rail and road building costly. Rail mileage, including many short feeder lines, was put at 2,046 in 1945; and highway mileage, at 42,700, about 16 percent improved. Air transit, however, is well advanced with seven lines serving the country in 1945 and there was tri-weekly service to the United States. In a normal year, two million tons of freight are carried on the Magdalena River, navigable for 854 miles and entering the Caribbean at Barranquilla, the chief port. Other rivers are navigable for a total of 4,500 miles.

Colombia's proposed 1946 budget was 174,000,000 pesos and the national debt in August of 1945 came to 360,379,113 pesos. British investments in 1944 were £7,714,689, and U. S. direct investments in 1940 were \$111,616,000.

Colombia has a 1,200 mile coast line and a climate ranging from tropical in the lowlands to temperate in higher altitudes. Through its western half, three great Andes ranges run north and south, merging to one range at the Ecuadorean border. Its eastern half is a low, jungle-covered plain, drained by spurs of the Amazon and Orinoco and inhabited mostly by uncivilized Indians.

Colombia's mountain ranges—the fertile plateau and valley of the eastern one is the most densely populated part of the country—have many, lofty, snow-capped peaks, including Mt. Huila, 18,700 feet, and Tolima, 18,438 feet.

Rich in minerals, Colombia has an oil industry surpassed in Latin America only by Mexico and Venezuela. The country is high in platinum and has world-famous emerald mines at Muzo in the eastern Andes. Mineral production in 1944 included 22,648,000 barrels of oil, 33,304 troy ounces of platinum, 554,000 ounces of gold and 200,000 ounces of silver.

Colombian forests, about 150 million acres covering a large part of the country from the western Andes to the eastern plain, are a great but little exploited source of wealth. Products include vanilla, quinine, ipecac, sarsaparilla, gums and balsams, tanning agents, dyewoods, hardwoods, vegetable ivory and rubber. Recent attempts have been made to develop wild rubber production in the southeastern jungles, some of them never explored by white men. Colombia also has a flourishing orchid business, stimulated by swift plane deliveries to other countries.

Alligators along many of the large rivers.

are hunted for hides. The rivers and lakes abound with fish and turtles, a source of commercial tortoise shell.

Costa Rica (Republic)

(República de Costa Rica)

Area: 19,238 square miles.

Population (est. 1944): 725,149.

Density per square mile: 37.6.

President: Teodoro Picado Michalski.

Principal city (est. 1914): San José, 77,182 (capital and only large city).

Monetary unit: Colón.

Racial stock (est. 1939): White (including Mestizo), 97%; Negro, 2%; Indian, 1%.

Language: Spanish.

Religion: Roman Catholic.

Costa Rica, discovered and probably named by Columbus in 1502, is distinguished in modern times as the most orderly and democratic of all the central American nations. A Spanish province from 1530, it joined the Central American Union in 1821 and became independent in 1839. Aside from boundary disputes with Panama and Nicaragua, Costa Rica's life has been comparatively tranquil. President Alfredo Gonzales was forced from office by a coup d'état in 1917, and his successor, Federico Pinoco, was overthrown in 1919, but since then Costa Rican internal affairs have been smooth.

The president is elected popularly for four years, and is eligible for further service after one term has intervened. The one-house Constitutional Congress of forty-four members is elected for four years. Nine ministers named by the president make up the cabinet, and each of the seven provinces has a presidentially-appointed governor. Military service is voluntary. There is an army of 500 men, a police force of 1,000 men, and 700 coast guards. In 1941-45, Costa Rica received U. S. military lend-lease goods worth \$139,000.

Costa Rica's illiteracy rate of less than 25 percent is the lowest in Central America, with elementary education free and compulsory. In 1941, a total of 761 primary schools had enrollment of 73,217; forty-nine intermediate schools, 7,251; and the national university in San José, 820.

Coffee, bananas and cacao are the basic products of Costa Rican agriculture, which is marked by the prevalence of small land holdings. Cotton, sugar cane, tobacco, corn, beans, rice and potatoes are subsidiary crops. Cattle are raised mainly for dairying, and manufacturing is virtually limited to locally-consumed products.

Coffee represents 65 percent of the country's export trade, about two-thirds of which goes to the United States. Bananas

are 15 percent of exports, cacao, 8 percent. Principal imports are cotton, oil, machinery, rail equipment, autos, and iron products. In the first half of 1945, imports amounted to \$12,371,268, with exports at \$7,078,106. The rail system totaled approximately 450 miles in 1942, with 771 miles of improved highway. Pan-American Airways serves the country, and there are local inter-city lines. Of fifteen radio stations, twelve are government-owned.

In recent years Costa Rican expenditures have exceeded revenues and the general government financial position is unfavorable. In 1944 the public debt totaled 206,796,550 colons.

Most of fertile Costa Rica is elevated tableland, 3,000 to 6,000 feet high, with sharp slopes to the Caribbean and Pacific. Tropical in the coastal lowlands, the climate is cool and healthful inland, with abundant but not excessive rainfall. Canal plans developed for the San Juan River, on the Costa Rican-Nicaraguan border, would give both countries a clear waterway from the Caribbean to the Pacific.

Gold—1943 exports totaled \$200,703—is the most valuable mineral, though silver, manganese, mercury and sulphur also exist. Oil indications have been found in the south. The mountain slopes yield such forest products as balsa, cedar, dyewood, mahogany and rosewood. Lumber exports in 1944, mostly balsa, came to 1,795 metric tons. The fisheries along the coast are valuable.

Cuba (Republic)

(República de Cuba)

Area: 44,164 square miles.

Population (census 1943): 4,788,624.

Density per square mile: 108.2.

President: Dr. Ramon Grau San Martin.

Principal cities (census 1943): Habana, 659,883 (capital, industrial center); Marianao, 120,163 (suburb of Habana); Santiago de Cuba, 118,266 (seaport, mining); Camaguey, 80,509 (cattle, sugar); Matanzas, 54,844 (seaport, sugar).

Monetary unit: Peso.

Racial stock (1944): White and Mulatto, 75%; Negro, 24%; Mongoloid, 1%.

Language: Spanish.

Religion: Roman Catholic.

Cuba, the largest of the many islands between North and South America, puts its paramount interest in the price of sugar. It is the second largest cane sugar producer in the world, and sugar and sugar products comprise more than 80 percent of its exports.

Its long history, often afflicted with strife and revolution, began for white men with discovery by Columbus on his first voyage in 1492. It was a Spanish colony until 1898, except for brief British occupancy in 1762-

23. Open war raged between the colonists and Spanish troops from 1867 to 1878. Fighting broke out again in 1895 and, at the end of the Spanish-American War which started in 1898, Spain gave up Cuba. Until creation of the Cuban republic in 1902, the island was ruled by the United States. For the first thirty-two years of the republic's life, the United States held the right to intervene in any crisis—a right which was invoked during insurrections in 1906 and 1917.

Corruption bedeviled Cuba after World War I, particularly during the eight-year presidency of Gerardo Machado who was ousted in a 1933 revolution. Five different residents tried to rule in the next few months and out of this came the dictatorship of Fulgencio Batista who climbed almost overnight from army sergeant to army commander-in-chief. In 1940 Batista legalized his reign by being elected to a four-year presidential term. He was succeeded in 1944 by Dr. Ramon Grau San Martin, backed by the Republicans and his own Autentico Party. Batista forces kept control of Congress until 1946 when Grau, with socialistic and pro-labor program, won dominance in the House of Representatives.

Cuba's president is elected by direct popular vote, in which women take part. The cabinet, though named by the president, is responsible to the Congress—a 54-member Senate and a 125-member House, both elected for four years. Much Cuban lawmaking is done through presidential decree, reviewable by the Supreme Court. The six provinces and 119 municipalities have locally-elected administrations. Each province has a court of appeals, and local civil, municipal and criminal courts.

Compulsory military service was established in 1942. The army numbers about 10,000; the navy, 2,700 manning some twenty small coastal craft. Two U. S. air bases and one naval base built in World War II at a cost of more than \$30,000,000 were turned over to Cuba in May of 1946. However, the United States retained its long-held naval base at Guantanamo.

About 20 percent of the 1944 national budget was spent on education which is free and compulsory from seven to fourteen. In 1942 there were 5,377 primary schools with enrollment of about 500,000; 1,200 secondary schools with 18,664 students; 100 arts and craft schools; and the National University in Havana had attendance of 13,949. Recent social legislation has effected a 44-hour week, a month's vacation for each eleven months worked, and compulsory maternity and accident insurance. The proportion of unionized workers is the highest in Latin America.

Half of the employed are in agriculture which accounts for over 90 percent of exports. Often jolted by fluctuation of the price of sugar, of which it produced 3,924,-

240 short tons in 1945, Cuba is now seeking to vary its crops. Other important ones are tobacco—65,700,000 lbs. in 1943-44; coffee—57,835,140 lbs. in 1944-45; cacao—4,000,000 lbs. estimated in 1944-45; and fruits, vegetables, henequen, corn and beans. The livestock and dairy industry has progressed greatly in the last fifteen years.

Leading manufactured products include sugar, molasses, syrup, brandy, rum, alcohol, cigars, cigarettes, cigar boxes, sponges, cement, cordage, salt, dressed hides, dairy products and canned goods.

Exports in 1944 totaled \$427,058,296, and the year before, \$350,622,767. Imports in 1944 came to \$208,643,434, and \$177,436,346 the year before. In value, sugar accounted for about 80 percent of exports, and tobacco, 8 percent. The United States handles 80 percent of Cuban trade; Britain, about 13 percent.

Railway mileage in 1944 was estimated at 3,850 miles, plus 3,000 miles of private lines on sugar estates. In 1942 there were 2,390 miles of improved highway, and about 2,000 miles of unimproved roads. Cuba has 118 radio stations, more than 250,000 radio sets, and 78,000 telephones. Air service is maintained by Pan American and the Royal Dutch Airlines, while domestic lines are operated by the Cuban National Aviation Company, a Pan American subsidiary.

Cuba's 1946-47 budget is estimated to balance at 173,382,000 pesos. At the start of 1943 the consolidated public debt was 118,416,000 pesos plus a floating debt estimated at from 50,000,000 to 90,000,000 pesos. American direct investments in 1940 totaled \$559,797,000. Banking is handled by 169 banks and branches, mostly American and Canadian; there is no central bank.

Long, skinny Cuba has maximum dimensions of 730 by 160 miles, and approximately the area of Pennsylvania. It has mountainous areas in the southeast, central and west but the rest is flat or rolling. The coastline of more than 2,000 miles is indented by numerous deep harbors. Cuba's numerous short rivers are of slight importance commercially. The tempering influence of the trade winds on the island's tropical climate make Havana's average temperature 77 degrees. Nowhere is rainfall deficient. Vegetation, growing from alluvial soil in tropic heat and humidity, is rich and varied.

Rich mineral beds, mostly in the eastern province of Oriente, include iron, copper, manganese, chromium and nickel. Iron ore reserves, estimated at 3,500,000 tons, are 90 percent held by U. S. steel interests. Virtually all mineral exports go to the United States, and during the war the United States spent about \$35,000,000 developing a jungle peninsula in eastern Cuba into one of the world's greatest nickel producing centers.

In 1940 Cuba had an estimated 3,500,000 acres of wooded land, with valuable cabinet woods such as cedar and mahogany, and also fibers, resins and oils. Cedar is used locally for cigar boxes, and mahogany is exported. Lobsters, oysters, crabs and shrimp are major sea food products.

Czechoslovakia (Republic)

(Československa Republika)

*Area: 49,321 square miles.

*Population (census 1930): 14,001,200.

Density per square mile: 283.9.

President: Eduard Beneš.

Premier: Klement Gottwald.

Principal cities (census of 1930): Praha (Prague), 848,823 (capital, industrial center); Brno (Brünn), 264,925 (textiles); Moravská Ostrava, 125,347 (iron and steel); Bratislava, 123,844 (Danube port); Plzeň (Pilsen), 114,704 (Skoda steel works).

Monetary unit: Koruna.

*Racial stock (census 1930): Czechoslovak, 69.4%; German, 23.6%; Magyar, 5%; Ruthenian, .7%; Polish, .6%.

Languages: See Racial Stock.

Religions (1930): Roman Catholic, 73.54%; Protestant, 7.67%; Czechoslovak Church, 5.39%; Greek Catholic, 3.97%; Jewish, .7%.

*Excluding Ruthenia.

Born as a nation out of World War I, Czechoslovakia was among the first to be hit by the German aggression that led to World War II. The country, about the size of Louisiana, was wiped off the map by appeasement and partition in 1938 and at its rebirth in 1945, Czechoslovakia was well under the shadow of Russia, with Communists strong in the government and a form of communism spreading steadily over the land.

It was in the 5th century, A.D., that the Czechs and Slovaks settled in the region they still occupy. Slovakia passed under Magyar domination, but the Czechs founded the Kingdom of Bohemia, which was among the most powerful in Europe for centuries. German encroachment began in the 14th century, was furthered by the election in 1526 of a Hapsburg as Bohemian king. After the Czechs rebelled in 1618 and were defeated at the Battle of White Mountain in 1620, they were ruled for the next 300 years by the Hapsburgs as part of the Austro-Hungarian Empire. In World War I, Czech patriots, notably Thomas G. Masaryk, went abroad to promote sympathy for Czech independence, while Czech legions built around captured prisoners of war fought against the Central Powers. On Nov. 14, 1918, Czechoslovakia proclaimed itself a republic with Masaryk as first president, and its independence was recognized on Sept. 10, 1919, by the Treaty of St. Germain.

Between World Wars I and II, Czechoslovakia supported the League of Nations, formed the Little Entente with Yugoslavia and Rumania, and cooperated closely with France. President Masaryk resigned in 1935, two years before his death at the age of eighty-seven, and was succeeded by Dr. Eduard Benes.

Meanwhile, the German plan of aggression was under way. Czechoslovakia's German minority, led by Konrad Henlein, began demanding autonomy. The government granted many concessions which, of course, were not enough to suit the Germans. Adolf Hitler, in an effort to justify himself, accused the Czechs of mistreating the German minority and lined up Nazi troops across the border.

The beginning of the end came at the infamous Munich conference on Sept. 30, 1938, when France and Britain agreed that the Nazis could take the Czech Sudetenland on the German border. Dr. Benes resigned on Oct. 5 and Czechoslovakia became a federal union in the German orbit. The Poles, in the meantime, had grabbed Czechoslovakia's Teschen area, and Hungary had taken areas in Slovakia and Ruthenia. In March, 1939, the Nazis set up Slovakia as a puppet state, declared Bohemia and Moravia to be Nazi protectorates, and gave Hungary the balance of Ruthenia. Both Slovakia and Bohemia-Moravia were occupied by German troops.

Czechoslovakia suffered cruelly under Nazi occupation. By sabotage and slow-downs, the Czech patriots and workers hindered the Germans and finally on May 27, 1943, near Prague, the brutal German administrator, Reinhard Heydrich, was fatally wounded. The Nazis responded savagely. Lidice, a nearby village, was destroyed completely, and all its men were shot. Soon after, the Germans also destroyed the village of Lezaky and killed all its adult population. Hundreds of other Czechs were executed in reprisal for the Heydrich killing.

Meantime, Dr. Benes organized a government-in-exile in London with Jan Sramek as premier. It was recognized by France, Britain and the United States. On Dec. 12, 1943, the exiled regime signed a treaty and mutual assistance pact with Russia. Soon after the government returned to Czechoslovakia in February of 1945, Ruthenia was ceded to Russia.

The constituent assembly elected in May 1946, was assigned to draft a new constitution to replace that of 1920 under which the country elected every seven years a president and a two-house parliament—a 150-member Senate and a 300-member Chamber of Deputies.

Czechoslovakia has become a member of the U.S.S.R. sphere of influence in economic life by treaty arrangement.

CONSTITUENT ASSEMBLY

Party	Seats
Bohemia-Moravia	
Communists	93
National Socialist	55
Christian Democrat	46
Social Democrat	37
Total	231
Slovakia	
Christian Democrat	43
Communist	21
Freedom	3
Labor	2
Total	69

On July 3, 1946, Communist Premier Klement Gottwald formed a twenty-six-member coalition cabinet in which Communists held nine places, with representation also going to the National Socialists, Slovak Democrats, Czech Christian Democrats and Social Democrats.

For administration, the country is divided into three provinces—Bohemia, Slovakia, and Moravia-Silesia.

The Czech army, with 205,000 regulars and 1,685,000 reserves, was regarded in 1938 as one of the best trained and equipped forces in the world. On March 16, 1939, the Germans declared it to be out of existence. The new Czech army, based on a cadre of Czech units which fought with the Red Army, is being trained and equipped by the Soviet Union with organization and armament patterned on the Russian design. Its estimated strength is 140,000. Soviet and U. S. occupation troops withdrew from Czechoslovakia in 1945.

Illiteracy is extremely low in Bohemia, higher in Slovakia. Elementary and higher grade schools (excluding Ruthenia) totaled 16,808 in 1937 with 2,032,873 pupils; 380 secondary schools had 154,768 pupils; while 4 universities—Prague, Czech (founded 1348); Prague, German; Brno, Czech; and Bratislava, Slovak—had 23,472 students.

One of the country's greatest problems is the ethnic variety of its population. Before Munich, however, these difficulties had been gradually overcome by a strict application of its democratic constitution, by providing all the minorities with schools and cultural institutions in their own languages, and by drawing minorities into active participation in the government. In view of the traitorous part played by German and Hungarian minorities in the disintegration of Czechoslovakia, the Government has decided to remove them from the country.

Economic nationalization is progressing rapidly. Decrees issued Oct. 24, 1945 ordered nationalization of nearly all industrial corporations with more than 500 employees.

All national resources, public utilities, transport, commercial banks, and insurance companies became state property. Redistribution of large estates had already been accomplished following World War I by the 1919 Land Reform Law which made it illegal for one person to own more than 350 acres of arable land. The social insurance system covers accident, sickness, disability, old age and death.

According to the last census, 34.64 percent of the population was engaged in agriculture, 34.94 percent in industry, 7.94 percent in commerce, 5.53 percent in transportation and 4.86 percent in public service and the professions. In 1937 about 42 percent (14,457,705 acres) of the total area was arable, 32.65 percent, forest; and 16.59 percent meadows and pastures. Sugar beets, corn (1938: 403,001 tons), wheat (1938: 1,199,793 tons) and high-grade barley (1938: 1,464,516 tons), and hops for beer-brewing are cultivated in low-lying areas. In more elevated regions cultivation of potatoes (1938: 10,834,617 tons), rye (1938: 2,101,094 tons) and oats (1938: 1,532,748 tons) predominates. Higher lands are used for growing fodder crops or for grazing. Livestock in 1938 included 4,938,133 cattle, 3,612,166 swine, 1,114,310 goats, and 43,981,767 poultry. Agricultural production (1945) was reported close to prewar levels, although the livestock population was seriously reduced.

Czech industry's highly developed position is important to foreign trade, since production far exceeds domestic needs. Agricultural products provide raw materials for important industries, led by the sugar industry whose 119 factories produced 572,746 metric tons of sugar in 1936. The beer industry has attained world-wide repute; 403 breweries produced more than 200,000,000 gallons of beer in 1935. There are also spirit, malt and foodstuffs industries. Abundance of coal and presence of iron ore give the country a big metallurgical industry. Output of pig iron in 1937 was 1,675,064 metric tons and, of raw steel, 2,317,634 tons. The Skoda steel works (Plzen) are one of the largest in Europe. Other industries are glass, porcelain, and pottery making, while large forest areas provide raw material for the timber, paper and cellulose industries. Also highly developed are the textile industries, including cotton, wool, flax and jute production, and the shoe industry. The famous Bat'a shoe factories are at Zlin.

Last foreign trade figures (Jan.-July 1938) showed exports of \$355,096,000 and imports of \$290,880,000. By percentage the principal customers were Germany 9.6, Britain 5.9, United States 4.5, Yugoslavia 4.2, Rumania 2.9, the chief suppliers, by percentage, were: Germany 10.3, United States 6.3, Rumania 3.5, Britain 3.4 and France 3. Manufactures, especially iron

and steel, textiles and glassware, accounted for 73.6 percent of the exports, followed by raw materials 18.5 percent; and foodstuffs 7.5 percent. Raw materials comprised 50.8 percent of the imports followed by manufactures 31.6 percent; and foodstuffs 15.7 percent.

The disadvantages of Czechoslovakia's landlocked position which places her at the mercy of her neighbors is offset somewhat by a well-developed system of internal communications. Czech railroads, totaling 8,650 miles in 1938, form a direct connection between the systems of eastern and western Europe, making the country an important communications center. Highway mileage (1939) totaled 43,718.

Internal waterways ran 255 miles in 1938, with 105 on the Danube connecting Czechoslovakia with the Black Sea; and 126 on the Elbe and Vltava, linking Bohemia with the North Sea. Danube traffic in 1935 came to 627,326 tons; the Elbe and Vltava carried 2,775,591 tons in 1938.

Government revenues in 1939 were \$322,-914,592; expenditures, \$344,127,116. The national debt was \$2,296,080,000.

A long and narrow country, 594 miles from east to west and with a width varying from 45 to 175 miles, Czechoslovakia lies athwart the great central European watershed between the Baltic, Black and North Seas. Mountains make several of its boundaries—the Carpathians by Poland on the northeast, the Bohmerwald by Austria on the southwest, and the Erze and Riesen range by Germany on the northwest. Many of the valleys are made fertile by the Danube, Elbe and Vltava and their tributaries. At Prague, in Bohemia, 650 feet elevation, the average annual temperature is 48.2 degrees, and the average annual rainfall is 19.6 inches. The corresponding figures for Presov, in eastern Slovakia, 850 feet elevation, are 46.8 and 25.6. Heavy winter snowfall is common in the highlands. Navigation on the Elbe and Danube is usually stopped by ice for six to eight weeks each year.

Most important of Czechoslovakia's varied minerals are pit coal and lignite, with the principal coal fields in the Ostrova-Karvinna area, and connected with the Polish fields of Upper Silesia. Production in 1938 was 17,416,340 tons of hard coal and 16,222,549 tons of lignite. Other 1938 mineral outputs were: antimony, 1,763,680 pounds; gold, 10,000 ounces; magnesite, 83,350 tons; oil, 6,504 tons; silver, 1,190,326 ounces; and zinc, 6,504 tons.

The 1942 estimated production of iron ore was 1,040,000 metric tons but much ore is imported to meet the demands of Czechoslovakia's normally-booming iron and steel industry. Excellent porcelain raw materials, particularly kaolin, are obtained

in western Bohemia and southern Moravia for an annual yield of about 400,000 tons.

Czechoslovakia is one-third forested and is one of Europe's richest forest lands. Lumber production in 1936 came to 52,-852,826 board feet.

Denmark (Kingdom)

(Kongeriget Danmark)

Area: 16,575 square miles.

Population (est. 1943): 3,949,000.

Density per square mile: 238.2.

Sovereign: King Christian X.

Prime Minister: Knud Kristensen.

Principal cities (est. 1940): Copenhagen (Köbenhavn), 700,465 (capital); Aarhus, 99,881 (shipping, commercial center); Odense, 87,521 (meat, dairy exports); Aalborg, 55,652 (seaport).

Monetary unit: Krone.

Racial Stock: Almost entirely Danish.

Language: Danish.

Religion: Evangelical Lutheran (state).

Denmark—one peninsula and 500 islands in the Baltic Sea—is a vast produce farm half the size of Indiana. Because of its rich production of meat, butter and eggs, it suffered almost no material damage from German occupation in World War II. Needing the Danish food, the Nazis permitted the Danish farmers to keep right on producing and when the war was over and much of Europe was a starving ruin, Denmark emerged as a comparative land of plenty.

A tiny nation today, Denmark once was powerful and feared. After a German monk named Ansgar converted the Danes to Christianity in A. D. 826, the islands and the mainland were united in the 10th century. The sovereign, Canute the Great, conquered England in 1015. In the 12th and 13th centuries under Kings Waldemar I and II, Denmark hit its peak. Under the terms of the Kalmar Union in 1397, it combined with Norway and Sweden. Sweden broke away in 1523. In the Napoleonic War Denmark picked the wrong side and when Napoleon was beaten, Norway was given to Sweden and Heligoland to Britain in 1814. Denmark lost again in 1864 when, after war with Austria and Prussia, Holstein, Schleswig and Lauenburg were ceded to Prussia.

The country, which had become a liberal constitutional monarchy in 1849, stayed neutral in World War I, after which a plebiscite returned to it a part of North Schleswig. In 1917 Denmark sold the Virgin Islands to the United States for \$25,000,000.

The Social Democrats, moderately socialist, dominated Danish politics in 1926 and 1929-40 in an era marked by acti-

participation in the League of Nations and close harmony with Norway and Sweden.

On May 31, 1939, eager for peace, Denmark signed a ten-year non-aggression pact with Germany. On April 9, 1940, seven months after World War II began, Germany invaded neutral Denmark. The British countered by occupying the Faroe Islands and also Iceland, which responded by declaring its complete independence from Denmark in 1944.

To save the country from destruction King Christian accepted the German occupation and the Danish policy became one of passive resistance against Hitler's attempts to form a "model protectorate." Underground workers led by the Danish Freedom council were active throughout the occupation, intensifying their efforts after the Normandy invasion. A total of 930 major acts of anti-Nazi sabotage was recorded in 1944 and 680 up to April, 1945. The cabinet and Rigsdag were considered suspended after Aug. 29, 1943 when the Danes refused to accede to German demands that saboteurs be tried in German courts. Following the German surrender the Danes quickly took over their government again with Social Democrat Vilhelm Buhl replacing Radical Erik Scavenius as premier on May 4, 1945. Buhl resigned when his Social Democrat party lost ground in the national elections of Oct. 30, 1945, and the King designated Liberal leader Knud Kristensen to form a new cabinet on Nov. 7, 1945.

Denmark's honored king, Christian X, of the house of Schleswig-Holstein-Sonderburg-Glücksburg, a soldier and sportsman who stands six feet six inches in height, succeeded to the throne on May 14, 1912. The king, who stoutly opposed excessive German demands throughout the Nazi occupation in World War II, was born on Sept. 26, 1870. He married Princess Alexandrine of Mecklenburg in 1898. They had two sons: Crown Prince Frederick, born March 11, 1899, who married Princess Ingrid of Sweden in 1935 and Prince Knud, born in 1900, who married Princess Caroline Mathilde of Denmark, his first cousin, in 1933. King Christian's brother, Prince Carl, was elected King of Norway in November of 1905 under the title, Haakon VII.

In its government, under the constitutional act of 1915, amended in 1920, Denmark is a constitutional hereditary monarchy with succession in the male line. Legislative authority rests jointly with the king and the two-house parliament—the Rigsdag. The 146-member Folketing, the lower house, is popularly elected every four years but can be dissolved by the king at will. Members of the Landsting, the upper house, are elected for eight years—fifty-six of them by popular vote and nineteen

by the outgoing Landsting. The cabinet, Statsraadet, presided over by the king who designates the premier, is the highest executive power, dealing with all new bills and important measures.

There are twenty-one counties, each under a governor. Copenhagen, the capital, is a separate district with its own administration. Local government is largely in the hands of local councils.

There is a supreme court (Højesteret) of 13 judges at Copenhagen; and two superior courts (Landesretterne) which handle serious offenses and also act as courts of appeal from the 99 lower courts.

For defense, military service is compulsory. Both army and navy are under the Ministry of Defense; the king is the supreme head of the armed forces. The army, 11,000 regulars and 89,000 reserves in 1939, was disarmed and disbanded by the Germans in 1943 but is being re-formed and re-equipped with British assistance. The navy on Dec. 31, 1945 had 2 frigates, 2 corvettes, 7 torpedo boats, and an assortment of smaller craft, many of them badly damaged by the wholesale scuttling which took place in 1943. Coast-defense forces are under naval jurisdiction.

Under the Danish system schooling is compulsory from 7 to 14 and, for the most part, free. However, in 1937, out of 4,498 lower schools, only 34 were government institutions; 3,899 were maintained locally, and 565 were private. The famous popular high schools (folkehøjskoler) for adult education number about 60, all private but assisted by the state. The royal university of Copenhagen, founded in 1479, has about 5,200 students and that of Aarhus, founded in 1928, about 500. Elementary schools in 1940 had 407,355 students; middle and secondary schools, 67,064.

Almost the entire population belongs to the Lutheran Church which is the established religion of the state, but there is complete religious toleration. The density of population on the islands is nearly twice that of the peninsula. Average annual birth rate, 1936-38, was 18.0 and the average annual death rate, 10.7.

Social legislation is well advanced and provides for medical aid, poor relief, child welfare, and workmen's compensation. The National Insurance Act requires everyone from 21 to 60 to belong to an approved sickness benefit society to which the state also contributes. The cooperative movement is also well organized.

In Denmark, ninety percent of the land is productive and 77 percent is actually farmed (7,939,000 acres). Agrarian reform laws have operated to bring about a large number of small holdings; of the 204,231 farms (1938) 41.2 percent were from 25 to 75 acres and only 2.8 percent of more than 575 acres. About two-fifths of the culti-

vated area is devoted to cereals, led by barley (1943 output: 1,399,221 tons), mixed grain (1943: 959,001 tons), oats (1943: 1,146,392 tons), rye and wheat. Production of root crops (fodder) in 1943 was 23,038,070 tons, potatoes 2,138,462 tons, and sugar beets 1,457,113 tons. The principal source of exports and of the nation's wealth is dairy farming and the production of bacon, pork, butter and eggs. Livestock in 1943 included 2,988,000 cattle, 2,449,000 swine, 6,418,000 poultry, 1,400,000 rabbits and 599,000 horses. Both crop and dairy farming are steadily improved as scientific methods advance.

Danish industry produces primarily for home consumption, though some products, such as Diesel motors, are a large export. In 1944 there were 6,635 industrial establishments with 191,484 workers and an output valued at 4,180,291,000 kroner. The largest industries were food-processing, 1,389 with a value of 1,833,718,000 kroner; and iron and metal, 1,130 with a value of 952,677,000 kroner. Others were chemical and pharmaceutical, wood and paper, clothing, textiles, machinery, beverages, and leather.

The per capita rate of Denmark's foreign commerce is exceptionally high. Exports in 1943 totaled 1,298,100,000 kroner; imports, 1,226,100,000 kroner. Of total exports of \$321,054,000 in 1939, the last completely normal year, 52.3 percent went to Britain, 23.3 percent to Germany, 4.9 percent to Sweden, 3.5 percent to Norway and 1.9 percent to the Netherlands. Imports, valued at \$354,091,000, come principally from Britain 33 percent, Germany 27 percent, United States 7.3 percent and Sweden 7.3 percent. The leading exports were bacon 24.4 percent (all to Britain), butter 23.5 percent, eggs 9.3 percent, live animals 5.6 percent, and machinery and fish. Leading imports were coal and coke 11.2 percent, iron and steel 8.4 percent, oil cake and meal (for feed), 5.9 percent, petroleum 4.5 percent, oil seeds 3.6 percent, automobiles 4.1 percent, chemical fertilizers 3.4 percent.

Before World War II the Danish merchant marine, fourth largest in the world on a per capita basis, totaled 2,705 vessels of 1,175,000 tons or about 300 tons per capita. Wartime losses were fixed at 518,000 tons. Regular communications with foreign countries are mainly westward by sea, via Esbjerg, with England, the Netherlands, Belgium and France. There are Swedish ferry services from Copenhagen to Malmo and from Helsingör (Elsinore) to Helsingborg. The main land route to the rest of the continent is the railway via Padborg and Schleswig to Hamburg. Railway mileage totals about 3,050, nearly half nationalized. Train-ferry schedules for inter-island communication are highly organized.

Motor transport also is well advanced,

with 31,744 miles of highway in 1940. In 1943 the country had 511,622 telephones.

Revenue for 1943-44 was estimated at 718,900,000 kroner; expenditures, at 962,500,000 kroner. Failure to balance the budget was caused in part by the cost of Germany's occupation army. The 1942 public debt was 1,090,993,000 kroner. U. S. investments in Denmark in 1939 were \$103,000,000.

Interesting geographically, Denmark, only three miles from Sweden at the closest point, has 11,411 square miles on the Jutland peninsula and 5,136 square miles on its Baltic islands. The largest islands are Zealand, 2,709 square miles, the site of Copenhagen; Funen, 1,149 square miles; and far to the east, Bornholm, 228 square miles. The narrow waters to the north are called The Skagerrak; and to the east, The Kattegat.

The terrain of the whole kingdom is low but not flat. Its highest point is about 500 feet, and there are many lakes, ponds and short rivers. Sand dunes ranging from 500 feet to seven miles belt the western Jutland coast almost without a break. Denmark's climate is like that of eastern England, but with colder winters and warmer summers. The average annual temperature is 45.2 degrees (61 degrees in July, 32 in January). Average rainfall is twenty-four inches.

Mineral resources are negligible, although some coal, granite and kaolin are found on Bornholm. Peat bogs supply an important source of fuel. Forest resources are unimportant.

The fishing industry, centered at Copenhagen but carried on both in the shallow belts and fjords and in the deeper waters of the Baltic, North Sea and Skagerrak, is a basic part of the Danish economy. The 1944 catch of 165,000 tons was valued at 150,000,000 kroner. The catch usually consists largely of plaice (flatfish) followed by cod, herring, mackerel, eel and haddock. Normally, about two-thirds of the catch is exported, usually fresh, ice-packed, or live.

Outlying Territories

FAROE ISLANDS. *Status:* Administratively a county of Denmark, represented in the Rigsdag. *Area:* 540 sq. mi. *Population* (1938): 26,000. *Capital:* Thorshavn. *Government:* Danish-appointed governor and locally elected assembly. *Foreign trade* (1939): Exports, \$2,242,000; imports \$2,163,000 (38 percent of trade to Denmark). *Principal products:* Cod (salt and dried) 84 percent; whale oil 8.8 percent; other fish 2.2 percent; wool; cod liver oil, fertilizers, skins and leather.

This group of 21 islands, lying in the North Atlantic about 200 mi. NW of the Shetland Islands, joined Denmark in 1386 and has since been part of the Danish

kingdom. They were occupied by British troops during World War II. The principal pursuits are fishing and sheep grazing. The predominant *Sjálvstjrisflokkur*, or Home Rule party, heads a movement seeking autonomy. The use of the local as well as the Danish language has been authorized to some extent.

GREENLAND. *Status:* Colony. *Area:* 839,782 sq. mi. (almost 85 per cent glacier). *Population:* Natives, 17,600; Danes, 600. *Capital:* Godthaab. *Government:* Divided into two inspectorates, whose officials are responsible to the director for Greenland in Copenhagen; no self-government. *Foreign trade* (1938): Exports, \$1,894,000; imports, \$669,000. *Principal products:* Cryolite (1944: 17,562 tons), fish, hides and skins, whale and fish oil, marble.

Greenland, the world's largest island, was explored in 982 by Eric the Red. Danish sovereignty which covered only the west coast, was extended over the whole island in 1917. In 1941 the United States signed an agreement with the Danish minister in Washington, placing it under U. S. protection during World War II but maintaining Danish sovereignty. U. S. weather stations were built on the island during the war. Greenland is the only source of natural cryolite, important in manufacture of aluminum. Trade (except cryolite) is a monopoly of the Danish crown.

Dominican Republic

(República Dominicana)

Area: 19,327 square miles.

Population (estimate 1945): 1,999,276.

Density per square mile: 103.4.

President: Rafael Leonidas Trujillo Molina.

Principal cities (est. 1945): Ciudad Trujillo, 123,780 (capital; sugar); Santiago de los Caballeros, 54,113 (tobacco); San Pedro de Macoris, 22,728 (sugar port); Puerto Plata, 15,610 (seaport).

Monetary unit: Dominican peso.

Racial stock (est. 1939): Mestizo, 40%; White, 40%; Negro, 20%.

Language: Spanish.

Religion: Roman Catholic.

The Dominican Republic occupies about two-thirds of the island of Santo Domingo which Columbus named Hispaniola when he discovered it on his first voyage in 1492. (The other third is Haiti.) The capital, Ciudad Trujillo, is the oldest white settlement in the Western Hemisphere, and the country, though nominally a republic, is one of the tightest dictatorships in the world. The Dominican Republic was variously under Spanish, French and Haitian domination until it set up independently in 1865 and then plunged into a notoriously unstable political history. U. S. Marines occupied it from 1916 to 1924 when a new

constitution was adopted. Since 1930 the constitution has meant little. In that year Rafael Trujillo, an army general, was elected president. He swiftly put down all opposition and became a virtual dictator. President most of the time since 1930, Trujillo has given his country an "orderly" regime with improved irrigation, roads, sanitation and schools, but the people have a minimum of personal liberty.

The president is supposed to be elected every five years by popular vote, in which women take part, but he is eligible to be re-elected for an indefinite period. He is assisted by a cabinet of eight secretaries. The 19-member Senate and the 38-member Chamber of Deputies are elected for five years. Each of the eighteen provinces has an appointed governor. There is a 4,000-man army, a small air force and several coast patrol craft. U. S. military lend-lease aid received in 1941-45 came to \$1,140,000.

Education is free and compulsory from seven to fourteen but the illiteracy rate was about 80 percent in 1935. About 1,896 primary schools had a 1943 enrollment of 203,992; seventy-nine intermediate schools had an enrollment of 7,545. Several hundred Spanish and European families live in the Dominican Republic but the mass of the population is mulatto and Negro. Ciudad Trujillo (formerly Santo Domingo), founded in 1496, is probably the best existing example of a Spanish colonial town of the 16th century. It is surrounded by ancient walls with bastions, and has straight narrow streets and massive-walled stone houses, and there still stands the fortress in which Columbus and his brother were imprisoned in 1500 by Bobadilla.

Before World War II, Trujillo invited 100,000 European Jews and other refugees to settle in the Dominican Republic, but only about 500 accepted.

Primarily agricultural, the country produced 416,630 short tons of sugar in 1944-45; 425,000 bags of coffee, each of 132 lbs.; 3,858 short tons of tobacco; and cacao, bananas, rice, corn, cassava, beans and sweet potatoes. The raising of hogs and cattle has been expanded recently. Sugar refining, largely U. S. controlled, is the only important manufacture.

Exports, more than 70 percent sugar, came to 60,269,328 pesos in 1944, and imports, to 18,524,575 pesos. Cocoa, coffee, molasses and tobacco are other chief exports. The main imports, mostly from the United States, are cotton goods, iron and steel products, chemicals and machinery. In 1943 about 60 percent of exports went to Britain, and about 30 percent to the United States.

Transit facilities in 1944 included 163 miles of public railway, 622 miles of sugar plantation railway, 1,200 miles of improved highway and 1,168 autos. Communication facilities included 2,400 telephones, 1,034

miles of telegraph wire, and eight radio stations.

In 1943 the Dominican Republic had revenue of 20,443,000 pesos, and spent 19,249,000 pesos. The 1940 external debt was \$16,160,000, and in the same year U. S. direct investments were \$41,895,000.

Crossed from northwest to southeast by a mountain range with peak elevation over 10,000 feet, the country has fertile, well-watered land on the northeast side where nearly two-thirds of the population lives. The southwest part is arid and with poor soil except around Ciudad Trujillo. The boundary with Haiti is 193 miles long and the coast line, 1,107 miles long.

Mineral resources are limited and production, negligible. Exports in 1944 included 988 oz. in gold, 2,240 short tons of salt, and 2,366 short tons of gypsum. The more readily accessible timberland has been thoroughly exploited, producing mahogany, lignum vitae and pine. Fishing is minor, not even meeting the local demand.

Ecuador (Republic) **(República del Ecuador)**

Area: 275,936 square miles.

Population (est. 1944): 3,171,367.

Density per square mile: 11.5.

President: José María Velasco Ibarra.

Principal cities (est. 1944): Quito, 165,924 (capital); Guayaquil, 172,948 (chief port); Cuenca, 52,519 (trading center); Riobamba, 27,459 (sugar, cereals).

Monetary unit: Sucre.

Racial stock (est. 1938): Mestizo, 54%; Indians, 27%; White, 8%; Mulatto, 6%; Negro, 2%; Others, 3%.

Language: Spanish.

Religion: Roman Catholic.

Third smallest of the South American nations, mostly forested and mountainous and a little larger than Texas, Ecuador has a long history bristling with the forceful rule of dictators. The Spanish under Francisco Pizarro conquered the land in 1532 by defeating the Inca Atahualpa, and two years later they founded Quito. The first revolt against Spain occurred in 1809 but the victory was not complete until the Battle of Pinchincha on May 24, 1822. Ecuador then joined Venezuela and Colombia in a confederacy founded by Bolivar and known as Colombia, but withdrew amicably and became independent on May 13, 1830. The country's subsequent history has been largely one of dictatorships, notably under Juan José Flores, Gabriele Garcia Moreno, and Elcy Alfaro. Since 1900 a regime has fallen, usually by force, on the average of every two years. Shortly before the 1944 elections, President Carlos Arroyo del Rio was forced to resign, and he was replaced by Velasco Ibarra, recalled from

exile in Argentina. Ibarra, confirmed in office by the voters later in the same year, followed the old pattern by assuming the dictator role in 1946 and suppressing opposition, sometimes with the use of U. S. lend-lease military equipment. Ibarra irked the United States in 1944 by recognizing the Perón regime in Argentina.

For more than one hundred years, Ecuador fought with Peru, frequently using guns, over the rich chacras border area as big as New Mexico. After hostilities started again in 1941, both nations submitted to mediation and when the decision was made final in 1944, Ecuador lost most of the disputed area.

Under a 1945 constitution, Ecuador elects a president for four years by direct vote, and he is ineligible for further service until at least one term intervenes. The congress is unicameral. Supreme Court justices, heading the judiciary, are elected by the congress. There are seventeen provinces and one territory, the Galápagos Islands, 600 miles off the coast. Military service is compulsory at eighteen with an army of 7,000 and 40,000 reserves. A 1,030-ton training ship and several smaller craft make up the navy. Ecuador has an aviation school at Guayaquil and a naval school at Salinas. For Panama Canal defense, the United States built a Galápagos base in World War II and this reverted to Ecuador in July, 1946. Ecuador's U. S. lend-lease military receipts totaled about \$6,000,000, including thirty tanks and fifty planes.

Education is free, compulsory and under state control but illiteracy is very high—an estimated 62 percent in 1945. School enrollment in 1944 was put at less than 300,000 in about 2,700 primary and forty secondary schools. Ecuador has universities at Quito, Guayaquil and Cuenca. Although Catholicism dominates, there is complete religious freedom. The country's proportion of Indian population is high.

Although agriculture is the basis of Ecuador's economy, less than 12,000,000 acres are devoted to it. Cacao, the chief crop, 39,400 metric tons in 1943—is grown in the coastal regions and lower river valleys, along with coffee, bananas, rice, sugar cane, tobacco and cotton. The plateaus and mountain valleys are used for grazing and dairying, and raising cereals and potatoes. Ecuador's main manufactured product is the Panama hat, made of Toquilla straw. 1940 exports ran to more than \$1,000,000.

Total imports in 1944 were valued at \$23,500,000, of which 52% were supplied by the United States; total exports were valued at \$33,100,000, of which 57% went to the United States. Chief imports, in order of value, were cotton and manufactures, food stuffs and chemicals, and drugs; chief exports were rice, straw hats, cacao beans, rubber, coffee and balsa wood. Petroleum exports in 1945 amounted to 279,278 metri-

tons of which 60% went to Canada, 21% to Argentina, and 18% to Uruguay.

Railway mileage in 1945 was 765, all nationalized. The principal road connects the chief port, Guayaquil, with Quito. Highway mileage was 4,280 of which 2,730 miles were termed all-weather. Pan American furnishes international plane service. Telephones in 1942 numbered 8,000; radio sets in 1941, 6,800; and broadcasting stations, 27.

The budget in 1945 balanced at 369,000,-000 sucres. U. S. Export-Import bank loans totaled \$15,200,000 as of June, 1945, with \$4,900,000 outstanding. The national debt on Oct. 31, 1944, was 448,300,000 sucres (about \$32,000,000). American direct investments in 1940 were \$5,107,000; British investments in 1944, \$3,807,340.

Two high and parallel ranges of the Andes, crossing Ecuador from north to south, are topped by tall volcanic peaks including Chimborazo (20,702 feet), Cotopaxi (19,498) and Cayambe (19,062). The region from the mountains to the coast is rich but extremely hot and swampy; beyond the mountains to the east is the rainy, forested and tropical Amazon plain, largely uninhabited. The longest river is the Rio Napo which joins the Amazon after 700 miles, but the most important is the Guayas, navigable for 200 miles from the Pacific. Though it lies on the equator, Ecuador ranges from tropical to temperate to the Arctic climate of its snow-capped peaks. Most of the population is in the high Andes basins or the Pacific lowlands.

The Galápagos Islands, of volcanic formation, half the area of Connecticut, once were notorious as a pirate hangout, later were studied by Charles Darwin before he wrote "The Origin of Species."

In 1942 Ecuador mined 128,684 oz. of gold and 129,832 oz. of silver. In 1945, 2,622,724 barrels of petroleum were produced. The country is the world's chief source of light, strong balsa wood, and exported 9,000,000 board feet in 1941. In the same year, 1,500,000 pounds of rubber were produced. Dye wood, cinchona bark, kapok and vegetable ivory from the ivory-nut palm are other forest products.

Egypt (Kingdom)

(Misr)

Area (approx.): 383,000 square miles.

Population (est. 1943): 17,423,000.

Density per square mile. 45.4.

Sovereign: King Farouk I.

Premier: Ismail Sidky Pasha.

Principal cities (census 1937): Cairo, 1,312,096 (capital); Alexandria, 685,736 (chief port); Port Said, 124,749 (Suez Canal terminus); Tanta, 95,260 (RR center, Nile delta); Mansûra, 69,036 (cotton); Damanhûr, 61,962 (farming center, Nile delta).

Monetary unit: Egyptian pound.

Racial stock (1927): Egyptian, 95.4%; Arabian, 1.7%; Greek, .6%; Others, 2.2%.

Language: Arabic.

Religions (1937): Mohammedan, 91.40%; Christian (mostly Copt and Greek Orthodox), 8.19%; Jewish, .40%; Others, .01%.

Historical Egypt, half again the size of Texas, and the largest and most influential of the Arab states, has been an object of big power controversy for centuries. In modern times its ambitions for complete and unfettered independence have been frustrated by the British who had to protect their Suez Canal life line through Egyptian territory. In World War II, one of the great decisive battles was fought just inside Egypt's western border in 1942 when British Empire troops stopped the advancing Nazis at El Alamein, thus saving Suez.

Egyptian history dates back to about 4000 B. C. when the kingdoms of upper and lower Egypt, already highly civilized, were joined. Persia conquered Egypt in 525 B. C. Alexander the Great conquered it in 332 B. C., and then the dynasty of the Ptolemies ruled the land until 30 B. C. when Cleopatra, last of the line, committed suicide, and Egypt became a Roman province. From 641 to 1517 the Arab caliphs ruled Egypt, and then the Turks took it and made it part of their Ottoman Empire. Mehemet Ali, leader of a band of Albanian soldiers became Pasha of Egypt in 1805, founding the present line of rulers. After completion of the Suez Canal in 1869, the French and British took increasing interest in Egyptian affairs.

Finally, British troops occupied Egypt in 1882 and British residential agents became its actual administrators, though it remained under nominal Turkish sovereignty. On Dec. 18, 1914, this fiction was ended and Egypt became a British protectorate.

Pressure by Egyptian nationalists forced Britain to declare Egypt an independent, sovereign state on Feb. 28, 1922, although the British reserved their rights for the protection of Suez and the defense of Egypt. On Aug. 26, 1936, by an Anglo-Egyptian treaty of alliance, all British troops and officials were to be withdrawn, except from the Suez Canal zone. When World War II started, Egypt remained neutral, though it early became a strategic base for allied forces, both for its key location to fight German offensives in North Africa and because of the vital importance of Suez.

In March, 1942, the Wafd party won the elections and controlled the government until its cabinet was dismissed by the king in October of 1944. Ahmed Maher Pasha, the Saadist leader, formed a coalition cabinet of all parties except the Wafd

and was assassinated on Feb. 24, 1945, while reading a declaration of war against the Axis. Mahmoud Nokrashy Pasha, the foreign minister, succeeded him.

In the face of increased nationalist pressure, the British offered, on Jan. 26, 1946, to review existing treaty arrangements with Egypt. The Egyptians were especially perturbed over what they called a prolonged stay of sizeable British forces in their country in the wake of World War II. To facilitate the negotiations, Nokrashy Pasha resigned on Feb. 15 and Ismail Sidky Pasha formed a new moderate cabinet of Liberals and Independents. The Saadists and the Makramists withheld participation, the extreme nationalists were not invited, and the Wafd could not participate because it had no parliamentary representation, having boycotted the elections of January, 1945.

Egypt's ruler, King Farouk I, born Feb. 11, 1920, succeeded his father, Fuad I, on April 28, 1936. He was married on Jan. 20, 1938, to Farida Zulfikar. Their children are Princess Ferial, born in 1938; Princess Fawzieh, 1940 and Princess Fadia, 1943. Since succession is limited to the male line, the heir presumptive is Prince Mohamed Ali, born in 1875, a first cousin to the king.

Egypt is a constitutional hereditary monarchy. The bicameral parliament has a Senate of 147 members, two-fifths of whom are appointed by the king and the rest popularly elected for 10 years; and a chamber of deputies of 264 members popularly elected by universal male suffrage for five years unless sooner dissolved by the King. The king acts through a cabinet appointed by him but responsible to Parliament. The Wafd party which represents the majority of Egyptian opinion has suffered from internal dissension and two major splinter groups exist—the Saadists and the Wafdist bloc (Makramists).

For local government the country is divided into five towns and fourteen provinces, whose administrators are responsible to the Ministry of the Interior.

The judicial system applicable solely to Egyptians includes the *Mehkemas*, religious courts which judge in all cases of personal status, and the national courts consisting of 102 summary tribunals, 11 central tribunals, 2 courts of appeal and, at the top, a court of cassation. Criminal jurisdiction of the consular courts was abolished by the Convention of Montreux (October 15, 1937), but mixed courts, composed of Egyptian and foreign judges, will continue to judge civil cases between Egyptians and foreigners and between foreigners of different nationalities until October 14th, 1949.

Under the Anglo-Egyptian Treaty of 1936 the peacetime strength of British troops

in the Suez Canal zone is set at 10,000 with 400 pilots, but no limit is set in time of war or international emergency. Military service is compulsory. The army in 1939 had 32,579 men but it has since been expanded considerably and re-equipped. The navy included 4 patrol vessels, 1 escort vessel and one transport. The principal bases are Alexandria, wartime headquarters of the British Mediterranean fleet, and Port Said.

Education is compulsory between ages of 7 and 12. In 1939 there were 4,065 elementary and secondary schools with attendance of 1,064,209. The University Mosque of el-Azhar in Cairo (founded 972 A. D.) is the chief theological seminary of the Moslem world. The University of Fuad I in Cairo (founded 1908) had 8,179 students in 1943 while the University of Farouk I in Alexandria (founded in 1943) had 2,049 students.

The great majority of the people are Sunni Moslems. The Christians are mainly Copts with an admixture of Armenian Syrian and Maronite sects. The head of the Coptic organization is the Patriarch of Alexandria whose jurisdiction also extends over Ethiopia. The population divides generally into fellahin or peasantry, and townspeople of the same blood, the Bedouins or Nomad Arabs of the desert, the Berberins who occupy the Nile Valley between Aswan and Dongola, and the foreigners, chiefly Greeks, whose main center is Alexandria. Egypt has perhaps the highest birth rate in the world (1934-3 annual average, 43.1; 1941 about 40.9) and one of the highest death rates (1934-3 annual average, 27.5). The density of the population in the small inhabited area (1,283 per square mile) is far in excess of Belgium or Bengal.

Agriculture is the chief industry, employing about 62 percent of the population. Only about 3.5 percent (8,620,850 acres of the total area is arable and only about 5,350,000 acres are actually under cultivation, almost entirely in the Nile Valley and delta. Irrigation is indispensable to agriculture; the Aswan reservoir above the first cataract of the Nile holds up to 5,500,000,000 cubic meters of water and that of Gebel Aulia, in the Anglo-Egyptian Sudan, 2,000,000,000 cubic meters. In the delta and middle Egypt where perennial canal irrigation is possible, two or three crops a year can be grown. The chief money crop is cotton of which Egypt is a big producer. Other crops include fruit, vegetables, roses, dates and grapes. The pastoral industry is relatively unimportant except to the Bedouin in the eastern desert. Buffalo are used to turn water wheels for irrigation. In 1943 there were 1,100,100 buffalo, 1,423,072 sheep, 1,202,284 cows, 826,796 donkeys and 174,054 camels.

MAJOR AGRICULTURAL CROPS, 1945

Crop	Acres	Tons
Maize	2,018,053	1,861,895
Wheat	1,774,550	1,300,365
Barley	372,000	287,760
Rice	664,320	917,300
Beans	406,898	339,125
Sugar cane		
(Sugar content)	99,648	183,755
Onions	26,988	171,350
Cotton (ginned)	1,019,316	263,250

Industry, in second place in the national economy, includes sugar refining, cotton spinning, milling, and pottery and perfume making. The French-controlled Sugar Company of Egypt holds a monopoly on sugar refining.

Imports were \$247,000,000, with Britain the biggest supplier. Exports in 1945 came to \$187,000,000, with Britain the largest customer. Chief imports were chemicals and drugs and mineral products, including oil. Major exports were cotton and other textiles, vegetable products, and food, beverages and tobacco products.

Navigable throughout its course in Egypt, the Nile is used largely as a means of cheap transport for heavy goods. The principal port is Alexandria. Railway mileage in 1943 totaled 4,429. Branch lines link Cairo and Alexandria with Suez and nearly every town in the Delta. Highway mileage 6,828. Telephone number 67,983. Payne Field, a large U. S. Army air base at Cairo, was turned over to Egypt in July of 1946. The 1945-46 state budget estimate was \$72,330,000, excluding expenditure of about \$257,000,000 for a five-year public works plan, hydroelectric development and cotton purchase program. The public debt on Oct. 31, 1944 was \$380,696,000, and the foreign assets reserve, \$414,213,800. A member of the sterling bloc, Egypt had a sterling balance on June 30, 1945, of \$50,000,000.

Egypt, at the northeast head of Africa, is a very rough square, with the historic Nile winding northward through its eastern third. On either side of the Nile Valley are desert plateaus, spotted with fertile oases. To the north, toward the Mediterranean, these plateaus are low, while south of the Nile they rise to a maximum of 1,015 feet above sea level. At the head of the Red Sea, off the northeast corner of Egypt, is the triangular Sinai Peninsula, lying between the Suez Canal and Palestine.

The thickly settled part of Egypt, one of the most thickly settled areas in the world, is the Delta of the Nile, starting 100 miles south of the Mediterranean and fanning out to a sea front of 155 miles between Alexandria and Port Said. From Cairo south, the Nile branches into many streams, the principal of which are the Nubia and the Rosetta, assisted by a

network of canals. Except for a narrow belt on the Mediterranean, Egypt lies in an almost rainless area, in which high daytime temperatures fall quickly at night.

The most important minerals are manganese ore (132,146 tons in 1939), and oil (9,100,000 barrels in 1944). Phosphate rock, gold, iron ochres, nickel, sodium carbonate, sulphate talc and tungsten also are mined. There are many valuable building materials and also turquoise and emerald mines.

Egypt has no forests. The total value of the fisheries in 1939 was \$3,529,595 for a catch of 32,026 tons. The chief fishing ground is Lake Menzala (780 sq. mi.) in the Delta but fish are also caught along the coast of the Delta and in the Nile. Dried and salted fish eggs (*batarekh*) are an Egyptian specialty.

SUEZ CANAL. The Suez Canal, in Egyptian territory between the Arabian desert and the Sinai Peninsula, is an artificial waterway 103 miles long between Port Said on the Mediterranean and Suez on the Red Sea. Construction work, headed by the French engineer Ferdinand de Lesseps, was begun April 25, 1859 and the canal was open Nov. 17, 1869. The cost was 432,807,882 francs. The concession is held by a French company, *Compagnie Universelle du Canal Maritime de Suez*, in which the British government holds 295,026 out of a total of 652,932 shares, purchased in 1875, by Disraeli for £3,976,582. The concession expires Nov. 17, 1968, when it will revert to the Egyptian government. On the board of management are one Dutch, two Egyptian, 19 French and 10 British directors. In the last normal year (1938), 6,127 vessels with a net tonnage of 34,249,745 passed through the canal; toll receipts were 1,784,278,091 francs. In 1945, 4,206 vessels with a tonnage of 25,064,966 passed through the canal; toll receipts were £9,911,500. Of the vessels, 63.42 percent were British; 22.17 percent, U. S.; 4.48 percent, Dutch; 3.11 percent, Norwegian; 2.52 percent, Greek; and 2.01 percent, French.

ANGLO-EGYPTIAN SUDAN. *Status:* Anglo-Egyptian condominium. *Area:* 967,500 square miles. *Population* (1942): 6,590,996. *Capital:* Khartoum (pop. 1944: 76,724). *Governor general:* Lt. Gen. Sir Hubert Huddleston. *Foreign trade* (1944): imports, \$41,380,000; exports, \$35,976,300. *Agricultural products* (1943-44): cottonseed (84,477 tons), ginned cotton (lint) (44,500 tons), millet (521,400 tons), sesame, wheat, groundnuts. *Minerals:* Gold, salt. *Forest product:* Gum arabic (1939: 26,868 tons).

The region which, before the revolt against Egyptian rule by the Arabized tribes under the Mahdi Mohammed Ahmed in 1881-84 was known as the Egyptian Sudan, has, since its reconquest by the

Anglo-Egyptian expeditions of 1896-98 been known as the Anglo-Egyptian Sudan. About one-fourth the size of Europe, it extends from north to south about 1,200 miles and west to east about 1,000 miles. A governor general, appointed by the King of Egypt on British recommendation, is assisted by a council of 6 to 8 members. The 8 provincial governors are responsible to him. All the higher administrative officials are British.

The northern Sudan is a continuation of the Sahara Desert. The southern region is fertile, abundantly watered and, in places, heavily forested. It is traversed from north to south by the Nile, all of whose great tributaries are partly or entirely within its borders. The highest elevation is a mountain range parallel to the Red Sea, with heights of 4,000 to over 7,000 feet. The Sudanese tribes, both Arabs and Negroes are, as a general rule, indolent. The Sudan is the chief source of gum arabic; the southern forests also are rich in fibers and tannins. There are two trunk railways, one connecting the Sudan with Egypt and the other affording access to the chief port, Port Sudan, on the Red Sea.

Eire (Republic)

Area: 26,601 square miles (not including larger water bodies).

Population (est. 1944): 2,938,000.

Density per square mile: 110.4.

President: Sean T. O'Kelly.

Prime Minister: Eamon de Valera.

Principal cities (est. 1943): Dublin (Baile Atha Cliath), 495,074 (capital); Cork, 75,484 (seaport); Dún Laoghaire (Kingstown), 42,105 (seaport); Limerick (Luimneach), 42,070 (seaport).

Monetary unit: Irish pound.

Racial stock: Irish.

Languages: Gaelic; English.

Religions (1936): Roman Catholic, 93.4%; Protestant Episcopal, 4.8%; Presbyterian, 1%; Other, .8%.

Eire—formerly Ireland—is an agrarian and cattle-raising state that occupies five-sixths of the island just west of England, across the Irish Sea. It is one-eighth the size of Texas but has four times as many head of livestock per acre. It is a moist, mild land of lovely lakes, no snakes and rich greenery, and is the country of origin of several million Americans. Eire's fiercely independent people are still subject to some of the tensions tracing back to their revolt against British rule in 1919-21.

In about the beginning of the Christian era, Ireland was divided into five kingdoms—Ulster, North Leinster, South Leinster, Munster and Connaught—each with its own ruler, but each subject to the Ard-Ri, the overlord of all Ireland who dwelt at Tara. St. Patrick introduced

Christianity in 432 A. D. and became the country's patron saint. Norse depredation along the coasts, starting in 795, were ended in 1014 by the Norse defeat at the Battle of Clontarf by forces under Brian Boru. In the middle of the 12th century the Pope gave all Ireland to the English crown. In 1171 Henry II of England was acknowledged "Lord of Ireland," but national rule continued for centuries as English control over the whole island was not reasonably absolute until the 17th century. By the Act of Union of 1800, England and Ireland became politically united as the "United Kingdom of Great Britain and Ireland."

Ireland wanted aggressively to be free. Several home rule bills were introduced in the English Parliament in the 19th century, but failed of passage. One was finally approved in 1914, but enforcement was suspended by the outbreak of World War I. During the war, heated agitation for freedom was carried on by the nationalist party—Sinn Féin (Ourselves). In 1916 the British quickly suppressed the famous Easter Week rebellion.

After the 1918 elections, seventy-three Sinn Féiners elected to the English Parliament met in Dublin, announced themselves an Irish Parliament, and approved a declaration of independence. The result was war between Irish nationalists and British soldiers from January of 1919 to May of 1921. A treaty ratified in December of 1921 gave Ireland political status equal to Canada. Six Ulster counties, largely Protestant, formed a separate government as Northern Ireland, closely bound to England; the other twenty-six became the Irish Free State. Republican extremists headed by Eamon de Valera, refused several years to recognize the treaty.

William Cosgrave, the right wing leader, was president from 1922 to 1932. In the year, de Valera's party, Fianna Fáil, won control of the government. Under de Valera's leadership a new constitution was adopted in 1937 making Eire, in effect, a republic with a president replacing the British governor-general, and with a majority party leader serving as prime minister.

The first president under this system was Dr. Douglas Hyde, with de Valera as prime minister. Throughout World War II Ireland maintained strict neutrality. In elections in June, 1945, the government candidate, Sean T. O'Kelly, the deputy prime minister, defeated his two opponents for the presidency—General Sean McBride and Dr. Patrick McCarton.

Eire is now a sovereign, independent democratic state. The oath of allegiance to England's king was abolished in 1933, and in 1945 de Valera described Eire as a public linked with the British Commonwealth.

wealth only by the External Relations Act of 1936. The president, directly elected for seven years, names the prime minister on the nomination of the chamber of deputies. Executive authority is in a cabinet of from seven to fifteen ministers. Parliament (Oireachtas) has two houses. The chamber of deputies (Dail Eireann) has 138 members elected by proportional representation for a seven-year term. The senate (Seanad) has sixty members, of whom eleven are named by the prime minister, six by the universities, and forty-three elected from vocational panels.

For administration, Eire is divided into twenty-six counties and four county boroughs, each governed by a local council. There is a five-judge Supreme Court; judges and justices of the Supreme Court are presidentially-appointed.

Military service is voluntary. The regular army of 7,933 in 1940 was expanded during World War II and a large voluntary force also was trained. By 1941 it was estimated that 250,000 men were in the army or volunteers. In 1938 Britain gave up its last defense posts in Eire, including those at Cobh, Berehaven and Lough Swilly. About 15 percent of the 1944-45 budget went for the defense of neutral Eire.

Elementary education is free and in state schools; secondary education is under private control, notably the religious orders. Technical and agricultural education is under local control, aided by state subsidies. The 5,032 elementary schools in 1943-44 had 454,647 students; 371 secondary schools had 39,787 students. University education is available at the University of Dublin (Trinity College) founded 1591, with a 1944-45 enrollment of 1,400 and the National University of Ireland (constituent colleges at Cork, Galway (Gaillimh), and Dublin) with an enrollment of 4,750.

The majority of the people are English-speaking, although the government has attempted to promote the traditional Gaelic language, which is an essential part of the curriculum for all state schools. While the birth rate continues to be relatively high (1936-38 average: 19.4; 1943: 21.7) the relatively high death rate (1936-38 average: 14.4; 1943: 14.7) and continued migration to the British Empire have resulted in a slight but steady decline in the population. The marriage rate is one of the lowest in the world (1936-38 average: 4.0; 1943: 5.8).

Eire is predominantly an agricultural country with about 70% of the total land area (17,024,485 acres) devoted to crops and pasture. The pastoral industry is the basis of the nation's economy, but recent years have brought a greater diversity in agriculture, marked by large increases in sugar beet and wheat production, and a slight decrease in dependence on livestock

exports. Principal crops in 1944 in short tons were potatoes, 3,360,800; wheat, 610,400; oats, 871,500; barley, 170,500; beet sugar, 89,100. Other staple crops are turnips, cabbage, flax, and hay. Livestock in 1944 included 4,245,936 cattle, 2,663,062 sheep, and 380,824 swine. Wool output in 1944 was 7,929 short tons. Agricultural production in 1943-44 was valued at about \$365,000,000.

The government's self-sufficiency policy and the financial and tariff inducements offered have promoted considerable industrial development since 1928. The leading manufactures, in order of value, are beverages, tobacco, wood and paper, clothing, textiles and metals. The hydroelectric plant erected on the Shannon River in County Limerick (estimated cost of full development: about \$35,000,000) provides cheap light and heat for homes throughout Eire as well as power for mills, dairies, and other industrial plants.

Exports in 1945 totaled \$140,011,145, of which 78.5 percent went to Britain; imports were \$164,050,995, of which 44.6 percent came from Britain, 13.7 percent from Canada and 10.5 percent from the U. S. The major export is cattle; others are bacon, beer, butter, horses, eggs and textiles. The major imports are textiles, coal and wheat followed by iron and steel, corn, tea, petroleum, clothing and tobacco.

The merchant marine in 1943 had 476 vessels with a net tonnage of 45,184. The inland waterway system with length and tons carried in 1943 includes Grand Canal (208 mi.; 227,403 tons), Royal Canal (96 mi.; 4,109 tons), and Shannon River (128 mi.; 69,489 tons). Railway mileage in 1943 was 2,493, mostly in the Great Southern system. Main roads in 1943-44 totaled 10,600 miles, and secondary roads, 38,300 miles. Cross-channel air service is supplied by Irish Airways, Ltd. and West Coast Air Services, Ltd. An air agreement with the United States, Feb. 5, 1945, gives U. S. air lines the right of commercial entry at Shannon airport. Telephones in 1944 totaled 51,000.

The monetary unit is the Irish pound which has the same value as the British pound sterling. Eire is part of the sterling bloc; sterling balances outstanding to her on June 30, 1945 amounted to £170,000,000. Revenue in 1945-46 was estimated at \$193,000,000 and expenditures, \$212,000,000. The public debt in 1945 was \$320,500,000.

Occupying the entire island except for the six northeastern counties of Ulster, Eire is a basin shape—a central plain rimmed about with mountains, except in the Dublin region. The mountains are low, with the highest peak, Carrantuohill in Kerry County, rising 3,414 feet. Eire's principal river is the Shannon, which begins in the north central, flows southwest for

240 miles and empties into the Atlantic. About 20 percent of the country is covered by bogs, and among Eire's many lakes are the Killarney lakes in the southwest.

Eire's moist and mild climate, with annual rainfall running between thirty and forty inches, is influenced by the Gulf Stream making the winters warmer than in other places in the same latitude.

In 1944 Eire mined 226,600 short tons of coal, some gypsum, and considerable peat from its bogs, but otherwise the mineral and also the forest resources are negligible. Some 10,000 Irishmen man a fishing fleet of 3,300 craft, two-thirds of which are row-boats. The 1944 catch, including mackerel, herring, whiting, cod, plaice and shellfish, was valued at \$2,356,000.

Ethiopia (Kingdom)

Area: 350,000 square miles.

Population (est.): 9,500,000.

Density per square mile: 27.

Ruler: Emperor Haile Selassie I.

Prime Minister: Bitwoded Makonnen Endalkatchau.

Principal cities (est. 1939): Addis Ababa, 150,000 (capital); Dire Dawa, 30,000; Harar, 25,000.

Monetary unit: Maria Theresa dollar.

Racial stock (est.): Abyssinian, 20%; Galla, 50%; Others, 30%.

Languages: Amharic, Arabic.

Religions: Christian (Copt), Mohammedan.

Land-locked Ethiopia, a country more than twice the size of California and situated in a table-land surrounded by deserts in east central Africa, was one of the first victims of the Axis aggression that led to World War II. Italy, after creating fake border incidents, invaded the country on Oct. 3, 1935 and the Ethiopian capital, Addis Ababa, fell on May 5, 1936. Haile Selassie, the emperor, fled the country and the Italians welded Ethiopia, Italian Somaliland and Eritrea into the colony of Italian East Africa.

World War II brought liberation. British and Ethiopian troops reconquered the country in 1941, with the final Italian surrender occurring on Nov. 27. During a transition period, the nation was under dual Anglo-Ethiopian control. Under an agreement signed on Jan. 31, 1942, British troops quit the country except for stipulated border areas, but a good deal of British supervision continued for several years thereafter.

The Ethiopian royal family claims descent from the Queen of Sheba and from Menelek, a son of King Solomon. Christianity was introduced in 330 A. D., and after the Arab conquest of northern Africa in the 7th Century, Ethiopia was more or less cut off from the outside world

for a thousand years. When Theodore III proclaimed himself emperor in 1853, the country was a conglomeration of autonomous provinces under hereditary chiefs usually at war with one another. Menelek II, taking the throne in 1889, brought Ethiopia under single rule and his forces finished off a five-year Italian attempt at invasion with a great victorious massacre at Aduwa on March 1, 1896. Revenge for this massacre was one of Mussolini's great war cries in the 1935-36 invasion against the forces of Haile Selassie, who had become emperor on Nov. 2, 1930.

Ethiopia's ruler Haile Selassie was born on July 17, 1891, crowned king on Oct. 7, 1928, and became emperor two years later. His son, the crown prince and heir apparent, is Afsa Wassan, born on July 27, 1916. The emperor directly controls the government, though a system has been installed which includes a Council of Ministers, a Senate and a Chamber of Deputies. The twelve provinces are each ruled by a Governor-general directly responsible to the Interior Ministry. In wartime, military service is compulsory. The small Ethiopian standing army is being equipped and trained by a British military mission.

The education system is extremely backward. Foreign missions or the government maintain schools in the principal towns, and there is one secondary school in Addis Ababa with seventy pupils. The Coptic Church (Christian), with its numerous priests, exercises a powerful position and owns much Ethiopian land. It is headed by the Abuna, an Egyptian Copt, appointed by the Coptic Patriarch of Alexandria. Moslems, numerous in frontier regions, have their religious center at Harar. Ethiopia's ruling clan, the Amhara, inhabits the central highland. The country also has various other Moslem, Coptic, Jewish and Somali tribes. Its towns are scattered, backward and crudely built.

Ethiopia is generally fertile, predominantly agricultural and pastoral, with many regions yielding two crops a year. The chief crops are maize, millet, barley, rye, cotton, sugar cane, wheat, hemp, vegetables, coffee and tef—the common bread grain. The country's almost non-existent transport system, however, makes crop growing largely a local industry. Canadian wheat, for example, can be delivered in Cairo cheaper than Ethiopian.

The country grazes several million cattle, and many goats and sheep. Horses and mules are bred extensively as pack animals and mounts. There is little manufacturing except for small native industry, though the Italians built some plants.

Imports in 1943-44 were \$15,776,850 and included salt, textiles, building materials, oil, sugar, glass and soap. Exports were \$8,812,875 and included coffee, hides, skins,

grain, wax, gold, cotton and butter. The 486-mile route from Addis Ababa to Jibuti in French Somaliland is Ethiopia's only rail outlet and principal trade route. Until about 1925, the country had no roads suitable for motor travel. After that year, the government built about a thousand miles of fair roads, and the Italians built roads totaling 4,340 miles, linking Addis Ababa with Eritrea, British Somaliland and the southeast.

Government expenditures in 1943-44 were \$12,622,343, while all revenues totaled about \$11,462,850.

Over its main plateau-land, Ethiopia has several high mountains; Dajan, the tallest peak, towers to 15,160 feet northeast of Lake Tana. Most of the many rivers are rapid, not navigable, and flow to the Nile. The Blue Nile, or Abbai, rises in the northwest and flows in a great semicircle east, south and northwest before entering the Sudan. Its chief reservoir, Lake Tana (1,100 square miles), lies 5,690 feet above sea level in the northwestern part of the plateau.

Gold, produced from placer mines worked by natives in the south and west, is Ethiopia's main mineral. Production in 1936 was 25,700 ounces. Platinum also is mined in fair commercial quantities. Other minerals are rock salt, cinnabar, copper, iron, mercury, mica, potash and sulphur. Oil is believed to exist under Ethiopia's surface and in 1945 all oil rights were sold to the Sinclair firm, of the United States.

Vegetation is dense in the valleys and lowlands, but the plateau is comparatively bare, especially in the north. The forests contain many valuable trees including the Natal yellow pine and the Kosso.

Finland (Republic)

(Suomen Tasavalta)

Area (1945): 134,324 square miles.

Population (est. 1940): 3,887,217.

Density per square mile. 28.9.

President: Juho K. Paasikivi.

Prime Minister: Mauno Pekkala.

Principal cities (est. 1939): Helsinki, 304,965 (capital); Tampere, 76,730 (textiles, paper); Turku (Åbo), 74,351 (seaport, shipbuilding); Vaasa, 32,695 (seaport).

Monetary unit: Markka (FM).

Racial stock: Finnish, 88.7%; Swedish, 11%; Others (Russian, German, Lapponic), .3%.

Languages: See Racial stock.

Religions (1937): Evangelical Lutheran, 97%; Greek Orthodox, 1.7%; Roman Catholic, .02%; Others, 1.28%.

Finland is a long-settled country of forests, lakes and fisheries and, most recently, of bad luck in unwanted war. In 1939-40 the Russians attacked Finland to enforce territorial demands and, while the

Finns stood off big Red Army assaults for 105 days, they finally lost and ceded to Russia 10 percent of their area including the Karelian Isthmus. Under German pressure and in spirit of revenge, the Finns joined the Nazis against Russia in World War II—and lost again. This time Russia took Finland's ice-free Arctic port of Petsamo, nearby nickel mines, and levied a \$300,000,000 indemnity to be paid in goods.

The sturdy Finns, whose Montana-sized country has its principal wealth in wood pulp, newsprint and paper, resigned themselves to hard work to pay their bill. Their leaders acknowledged gratitude for two things—Russia could have crushed Finland completely in either war, but didn't; and there was a minimum of internal Communist pressure in Finland.

The Finns, a distinctive people of possibly Mongolian origin, first settled their area substantially in about 100 A.D. King Eric IX, of Sweden, conquered them in about 1155 and introduced Christianity. Under Swedish rule, which lasted for 650 years, the Finns retained considerable autonomy and were given their own parliament in the 17th century.

Political pressure growing out of the Napoleonic Wars forced Sweden in 1809 to cede Finland to Russia which gave the Finns a constitution and set them up as a grand duchy. Out of the chaos and complexities of World War I, the Russian revolution of 1917 and a Finnish civil war in 1917-18 between radicals and rightists, Finland emerged as a republic in 1919. A year later Russia ceded to Finland the Petsamo area which it reclaimed in 1944.

For the next twenty years Finland was generally orderly and prosperous, with decorum marred only by vigorous suppression of Communists and a rightist uprising in 1932. The national presidents were K. J. Stahlberg, 1919-25; Lauri Relander, 1925-31; P. E. Svinhufvud, 1931-37; K. Kallio, 1937-40; Risto Ryti, 1940-44; and Carl G. Mannerheim, 1944-46.

Ryti and Premier Edwin Linkomies, pro-Germans, were forced to resign on Aug. 1, 1944, and were replaced by Mannerheim and Antti Hackzell. Finland severed relations with Germany on Sept. 2, signed armistice on Sept. 4, and signed a provisional peace treaty with Britain and Russia on Sept. 19. The United States had not declared war on Finland.

Pro-Russian Juho K. Paasikivi became premier on Nov. 11 and when Mannerheim resigned because of illness on March 4, 1946, Paasikivi was elected by the Diet to the unexpired term ending March 1, 1950. The premiership went to Mauno Pekkala, leader of the just-formed Socialist Unity Party, made up of dissident and left-wing groups advocating cooperation with Communists in a popular democratic bloc.

Under a 1919 constitution, the 200 Diet members are popularly elected by a proportional representation system for three-year terms. The president, chosen for six years by an electoral college of 300 members nominated by the people, acts through his cabinet headed by the prime minister. Suffrage is universal for men and women over twenty-four. Because of the many political parties, the government usually is carried on by a coalition, with frequent cabinet changes.

Following the armistice an Allied Control Commission composed of English and Soviet military representatives was formed under the chairmanship of Soviet Col. Gen. A. A. Zhdanov. The Commission, Soviet-dominated, has concerned itself primarily with reparations, interfering but little in Finnish political life and making no effort at communism.

The judicial system, separated from the government, consists of a supreme court, 3 superior courts, and numerous district courts.

Military service is compulsory from 17 to 60; the initial training period is 1 year, after which trainees pass into the reserves. The president is commander-in-chief of the armed forces but may delegate his authority in wartime. In peacetime the Minister of Defense administers the armed forces, including the army, navy, air force and coast defense. At full mobilization Finland had about 20 divisions and 400,000 men in the field, plus a voluntary force of about 100,000 Civic Guards. The navy, on Dec. 31, 1945, consisted of one coast defense ship, five submarines and a number of small craft including minesweepers and launches.

Illiteracy is very low (.9% beyond age of 15). Education is compulsory from 7 to 15. In 1939 there were some 11,200 elementary schools with 411,000 students, 383 vocational schools with 20,583 students, 68 middle schools with 8,546 students, and 150 lyceums with 42,034 students. There were three regular universities of which Helsinki (founded 1640 at Turku) had the largest enrollment, 6,461.

The Swedish minority lives mostly in the southwest and the Aland Islands. About 60 percent of the total population is engaged in agriculture, 17 percent in mining and industry, 3.8 percent in transport, 4.3 percent in commerce, 2 percent in professions and 11 percent miscellaneous. Since 1918 the Finnish rate of population increase has been about 15 percent as compared with the European rate of 10 percent. The average annual birth rate in 1934-35 was 19.6, the highest in Scandinavia, while the average annual death rate in 1936-38 was 13.3. Considerable progress has been made in social legislation, including workmen's compensation. The cooperative movement is extensive. By a 1927 law, ex-

propriation of large estates was carried out with compensation to their owners.

Only about 3 percent of the land is under cultivation and about 5 percent in grassland (1940). The chief crops (1939, in short tons) were oats, 879,635; rye, 364,861; wheat, 250,222; barley, 306,280; potatoes, 1,715,179; and hay, 3,807,344 tons. Grazing lands are extensive. Livestock in 1939 included 1,938,000 cattle, 1,000,000 sheep, and 519,000 swine; there were 100,356 reindeer in 1937. Butter production in 1937 was 29,711 tons. Agriculture production in 1945 was estimated at more than a fifth below prewar levels.

In 1938 there were 4,422 larger manufacturing establishments with 214,387 workers and an output value of \$454,955,590. The leading manufactures were wood and paper (about $\frac{1}{2}$ of the total value), food and luxury items, machinery, and textiles. Following the cession of the Karelian isthmus and the city of Viipuri there remained 3,896 plants whose industrial production was valued at about \$398,000,000.

Exports in 1941 amounted to 4,189,000,000 FM and imports, to 8,818,000,000 FM. These statistics reflect war conditions; prior to the war Finland usually enjoyed a slightly favorable trade balance. In the last normal year (1938) pulp paper comprised 41 percent of exports; timber and wooden articles 39.9 percent; and food of animal origin 3.3 percent; metal and metal goods made up 16.5 percent of the imports; machinery and apparatus, 13 percent; minerals and manufactures, 7.7 percent; colonial produce and spices, 6.8 percent; and oils, fats and waxes, 5.8 percent. In that year 43.9 percent of the exports went to Britain; 15.2 percent to Germany; 9.2 percent to the U. S.; 4.8 percent to Sweden, and 4.4 percent to the Netherlands; while 21.1 percent of the imports came from Britain, 20 percent from Germany, 13 percent from Sweden, 9 percent from the U. S., and 5.1 percent from Belgium. Trade with the U. S. S. R. was negligible. Foreign trade other than with the U. S. S. R., is now curtailed by Soviet reparations payments to be made in kind.

The merchant marine in 1938 totaled 3,431 vessels of 544,000 tons. The numerous lakes, many of them joined by canals, are busy transport routes. About 40,000 vessels and 18,000 timber rafts use the canals annually. There were approximately 20,300 miles of highway in 1938 and 19,000 miles of secondary road. Railway mileage in 1938 totaled 3,658, almost entirely nationalized. Telephones in 1941 numbered 186,500.

The budget in 1946 totaled 55,000 million FM. The consolidated debt in 1943 was 44,800,000,000 FM as compared to 4,074,200,000 FM in Sept. 1939.

Finland stretches 700 miles from the Gulf of Finland on the south to Soviet

Petsamo, north of the Arctic Circle. Off the southwest coast are the Aland Islands, more than 300 of them, controlling the entrance to the Gulf of Bothnia. Finland has more than 60,000 lakes including Lake Ladoga, which is part Russian and the biggest lake in Europe. Of Finland's 1939 area, 11 percent was lake and 48 percent, swamp-land. Of the few rivers, only the Oulu is navigable to any important extent. Most of the country is tableland 400 to 600 feet in elevation, with a few rises to 2,000 feet in the Halditjikko region of the northwest. Finland's long severe winters are moderated a bit along the coast by prevailing southwest winds, but the summer lasts only about two and a half months. While southerly Finnish ports are icebound part of the year, Petsamo way above the Arctic Circle is always open, warmed by the Gulf Stream.

Finland has no coal or oil and many of its mineral deposits are remote from transportation. Copper production in 1939 was 13,004 tons. Finland's sulphide ore, yearly production about 300,000 tons, is 4 percent copper, 26 percent sulphur, and 27 percent iron with some zinc, cobalt, gold and silver. Limestone, soapstone and red granite deposits are extensive. Wood and peat are the only natural fuels.

Over a third of Finland is high quality timberland—the nation's richest natural resource. Exports of lumber, pulp and paper in 1938 totaled \$127,067,000—81 percent of total exports.

Finns have fished for centuries, not commercially, but for domestic consumption. The 1938 catch was 24,647 tons, 60 percent in Baltic herring.

Rulers of France

Name	Born	Ruled	Name	Born	Ruled
Carlovingians			41 Charles IX	1550	1560-1574
1 Charlemagne	742	768-814	42 Henry III	1551	1574-1589
2 Louis Debonair	778	814-840	Bourbons		
3 Charles the Bald	823	840-877	43 Henry IV of Navarre	1553	1589-1610
4 Louis II	846	877-879	44 Louis XIII, the Just	1601	1610-1643
5 Louis III	863	879-882	45 Louis XIV	1638	1643-1715
6 Carloman	?	882-884	46 Louis XV	1710	1715-1774
7 Charles the Gross	832	884-887	47 Louis XVI	1754	1774-1792
8 Eudes	?	888-898	(Louis XVII)	1785	Claimant
9 Charles III	879	898-922	First Republic		
10 Robert	865	922-923	48 National Convention	—	1792-1795
11 Rodolph of Burgundy	?	923-936	49 Directory	—	1795-1799
12 Louis IV	921	936-954	50 Consulate	—	1799-1804
13 Lothair	941	954-986	First Empire		
14 Louis V	967	986-987	51 Napoleon I	1769	1804-1814
Capets			Bourbons Restored		
15 Hugh Capet	938	987-996	52 Louis XVIII	1755	1814-1824
16 Robert the Wise	970	996-1031	53 Charles X	1757	1824-1830
17 Henry I	1008	1031-1060	Orleans		
18 Philip I, the Fair	1052	1060-1108	54 Louis Phillippe	1773	1830-1848
19 Louis VI	1081	1108-1137	Second Republic		
20 Louis VII	1121	1137-1180	55 Louis Napoleon	1808	1848-1852
21 Philip II	1165	1180-1223	Second Empire		
22 Louis the Lion	1187	1223-1226	56 Napoleon III	1808	1852-1871
23 Saint Louis IX	1214	1226-1270	Third Republic		
24 Philip III, the Hardy	1245	1270-1285	57 Thiers, L. A.	1797	1871-1873
25 Philip IV, the Fair	1268	1285-1314	58 MacMahon, M. de	1808	1873-1879
26 Louis X	1289	1314-1316	59 Grevy, Paul	1807	1879-1887
27 John I	1316	1316-1316	60 Sadi-Carnot, M.	1837	1887-1894
28 Philip V, the Tall	1294	1316-1322	61 Casimir-Perier, Jean	1847	1894-1895
29 Charles the Fair	1294	1322-1328	62 Faure, François	1841	1895-1899
Valois			63 Loubet, Emile	1838	1899-1906
30 Philip VI	1293	1328-1350	64 Fallieres, Armand	1841	1906-1913
31 John II, the Good	1319	1350-1364	65 Poincare, Raymond	1860	1913-1920
32 Charles V, the Wise	1337	1364-1380	66 Deschanel, Paul	1856	1920-1920
33 Charles VI	1368	1380-1422	67 Millerand, Alex.	1859	1920-1924
34 Charles VII	1403	1422-1461	68 Doumergue, Gaston	1863	1924-1931
35 Louis XI	1423	1461-1483	69 Doumer, Paul	1857	1931-1932
36 Charles VIII	1470	1483-1498	70 Lebrun, Albert	1871	1932-1940
37 Louis XII	1462	1498-1515	71 De Gaulle, Charles	1890	1944-1946
38 Francis I	1494	1515-1547	72 Gouin, Felix	1884	1946-1946
39 Henry II	1519	1547-1559	73 Bidault, George	1899	1946-
40 Francis II	1544	1559-1560			

France and the French Colonial Empire

Country	Area, sq. mi.	Population estimates Dec. 31, 19
FRANCE		
AFRICA	212,741	41,980,000
French Equatorial Africa	959,982	3,431,673
Gabon	93,219	410,098
Middle Congo	166,069	641,119
Ubangi-Shari	238,748	946,137
Chad	461,202	1,431,806
Cameroun	162,892	2,655,000
Algeria	851,078	7,600,000
Morocco	153,870	8,000,000
Tunisia	48,300	2,730,000
French West Africa	1,814,808	15,582,535
Dahomey	43,232	1,424,220
French Guinea	96,886	2,117,705
French Sudan	591,064	3,794,270
Ivory Coast	184,174	4,074,041
Mauritania	322,310	366,853
Niger	499,411	1,944,190
Senegal	77,663	1,723,068
Dakar and Dependencies	68	165,188
Togo	21,809	880,927
French Somaliland	8,376	40,100
Madagascar and Dependencies	229,439	4,122,000
Réunion	970	221,000
AMERICA		
St. Pierre and Miquelon	93	4,000
French Guiana	7,720	31,000
Inini	27,020	6,000
Guadeloupe	687	310,000
Martinique	427	260,000
ASIA		
French India	197	329,000
French Indo-China	286,119	23,700,000
Annam	56,974	5,656,000
Cambodia (Cambodge)	69,866	3,046,000
Cochinchine	24,974	4,616,000
Kwangchowwan	325	250,000
Laos	89,320	1,012,000
Tongkin	44,660	8,700,000
OCEANIA		
French Pacific Settlements	1,545	45,000
New Caledonia	7,200	55,000
New Hebrides	5,700	50,000

*1936. †1941. ‡1944.

France (Republic)

Area: 212,741 square miles.

Population (est. 1945): 41,980,000.

Density per square mile: 197.3.

President: Leon Blum (interim).

Principal cities (census 1936): Paris, 2,829,746 (capital); Marseille, 814,679 (chief port); Bordeaux, 256,369 (seaport; wine); Nice, 209,382 (resort center); Lille, 200,757 (textiles); Strasbourg, 192,680 (chief Rhine port); Nantes, 190,465 (manufacturing).

Monetary unit: Franc.

Racial stock (1936): French, 94.2%; Others, 5.8%.

Religion (est.): Roman Catholic, 97.5%
Protestant, 2.5%.

One of the world's great nations in culture, art and learning, France was blec and devastated in World Wars I and II and emerged in mid-1944 after more than four years of Nazi occupation, as a staggering country. For its government, it sought a new constitution. For its shattered economy, it sought loans to re-vitalize field and factory. For its security, it sought, as of old, the assurance that Europe would never again see a strong Germany.

Fertile agrarian France is about the size of California and Illinois combined. It was ancient Gaul when Julius Caesar conquered a part of it in 58-51 B.C. In the 5th century A.D., it was overrun by the Franks, a Teutonic tribe. Between 768 and 814, Charlemagne created a Frankish empire covering most of Western Europe, but by the time Hugh Capet came to the throne in 987, his kingdom comprised only the region around Paris. For more than 300 years the Capets struggled to unify the many feudal fiefs.

Philip VI, cousin of the last Capet and first of the House of Valois, took the throne in 1328. Soon after, there began the Hundred Years' War, the struggle over England's bid to seize the French crown. The English won at Crécy in 1346 and at Agincourt in 1415, but were defeated at Orleans in 1429 by the French forces led by Joan of Arc. Cruel persecution of French Protestants, the Huguenots, was followed by civil war and then the Edict of Nantes in 1598 by which they received complete religious freedom from Henry IV, the first of the Bourbons.

Splendor, wealth and the establishment of a colonial empire marked the long reign of Louis XIV from 1643 to 1715. Its extravagance, however, forced Louis XVI to struggle with a tax problem at a time when the forces of revolution were boiling to a head among France's lower and intellectual classes. The first chapter of the French Revolution, of world significance for its impact on absolute rule, broke in 1789. The king was deposed in 1792 and executed the next year. Then came the Reign of Terror as the revolution swung to excess, the Directory from 1795 to 1799, and the Consulate from 1799 to 1804, after which Napoleon was proclaimed emperor. Meanwhile, French armies were engaged on all sides, spreading French hegemony over most of western and central Europe. The downfall came at Waterloo on June 18, 1815. The restored Bourbon, Louis XVIII, reigned until 1824 and was succeeded by his reactionary brother, Charles X, who was overthrown in the July revolution of 1830. Louis Philippe, of Orleans, was unseated in 1848, and succeeded by Napoleon's nephew, Louis. Inaugurated president of the Second Republic in 1848, Louis became emperor in 1852 and abdicated after France's defeat in the Franco-Prussian War of 1870-71. The resultant conflict between republicans and monarchists was resolved by the adoption of republican constitution in 1875.

Victorious with the allies in World War under Premier Georges Clemenceau, 1917-19, France emerged as the dominant power on the continent. From 1919 on, its aim was to keep Germany weak through a system of military alliances and by maintaining a strong French army.

The effort was a dismal failure. At home France was weakened by economic and political instability, with many short-lived cabinets. Germany became a dictatorship, with every national energy bent toward war. France, permitting political freedom, bickered and argued away its years. The leftist Popular Front coalition of Leon Blum, in 1936-37, and Camille Chautemps, 1937-38, was succeeded by the Radical Socialist and Radical cabinet under Edouard Daladier, one of the men of Munich.

Paul Reynaud took Daladier's place on March 21, 1940, less than seven months after the start of World War II. In May of 1940, Hitler's Nazi armies finally roared into France and on June 16, the reins of government fell to Marshal Henri Pétain who opposed continuation of the war. An armistice was signed June 21. The Third Republic was voted out of existence on July 10 by the National Assembly at Vichy and unoccupied France became totalitarian, with Pétain as chief of state.

Meanwhile, in London, General Charles de Gaulle formed on June 18, 1940, a provisional French National Committee which received British recognition. On Sept. 25, 1941, the French National Committee was formed, and changed its name to Fighting France on July 14, 1942. Then, on June 3, 1943, the French Committee for National Liberation was formed in Algiers.

After the liberation of Paris, de Gaulle entered the capital on Aug. 25, 1944, and formed a provisional government on Sept. 10, which was regarded as a continuation of the Third Republic. It received Allied recognition on Oct. 23. A twenty-year alliance with Russia was signed on Dec. 10, 1944. After the elections of Oct. 21, 1945, de Gaulle was named provisional president on Nov. 13 by the National Assembly. He resigned soon after and was succeeded by Félix Gouin, a Socialist, on Jan. 23, 1946. When the electorate rejected the new proposed constitution on May 5, and a new National Assembly was elected on June 2, Gouin resigned. Georges Bidault was elected to succeed him on June 19.

In the elections of Oct. 21, 1945, France picked a new National Assembly and assigned it to draft a new constitution. The resulting proposed constitution, providing for a strong legislature and a weak executive, was rejected by the electorate on May 5, 1946. The new Assembly, elected on June 2, was given seven months to draw up another constitution for submission to the voters. Meanwhile, France operated for the interim with a 586-member Assembly, empowered to elect the president who then formed a cabinet responsible to the Assembly.

On October 13, 1946, France adopted its fourteenth constitution by a vote of 9,126,370 to 8,043,366 (32 percent of the electorate not voting).

Metropolitan France is divided into ninety departments headed by regional commissioners. The lowest administrative unit is the commune with a locally elected mayor and council. There are also cantons, each composed of about twelve communes.

DEFENSE. The Head of Government is Minister for National Defense and Chef des Armées. He is assisted by the Minister of the Armed Forces and the Minister of Armaments. The chief of the General Staff for National Defense advises the Head of Government on general military matters. Under the Minister of the Armed Forces are three Chiefs of Staff for the Army, Navy, and Air Force. The strength of the army is fixed at 500,000 men. Military service is compulsory; recruits are called up at 19, serving for 14 months. The strength of the air force is stabilized at 100,000, and that of the navy, at 135,000. The navy, on Dec. 31, 1945, had 3 battleships, 1 escort carrier, 28 destroyers and large torpedo boats, 28 submarines and numerous other vessels. In 1946 the British navy leased to France for 5 years the aircraft carrier Colossus (14,000 tons) and also gave her 6 destroyers and 2 submarines from the British share of the German fleet.

EDUCATION. The educational system under the Third Republic presented the most complete type of a state system of education organized under a strongly centralized administration in all grades. The national minister of public education was assisted by a *conseil supérieur* of 52 members largely elected by the higher teaching profession. The country was divided for administration into 17 regional academies. Elementary education was free and compulsory from 6 to 14; instructors had to be lay, and religious instructions was prohibited in state schools. State elementary schools in 1937-38 numbered 70,069 with 4,503,669 pupils; 11,521 private schools had 932,885 pupils. In 1938 secondary education for boys—7-year course—was provided in *lycées* maintained by the state (130 with 124,767 pupils); by the communal colleges (222 with 64,281 pupils); and in private *écoles libres*. The secondary course for girls differed in scope and lasted 5 years; there was a total of 195 institutions with 93,301 pupils (1938). Higher education was supplied by the state in the universities and in special schools, and by private faculties and schools. There were in 1938 seventeen universities with 74,932 students; the largest, the University of Paris (Sorbonne), founded 1150, had 34,252 students, many of whom were foreign. In addition, there were numerous other professional, technical and vocational schools, and each department was required to maintain 2 normal schools, one each for men and women.

RELIGION. The predominant faith is Ro-

man Catholicism, but Church and State were separated in 1905. Diplomatic relations with the Vatican were resumed in 1921, and lesser church property was returned to diocesan associations in 1924.

RACIAL STOCK AND POPULATION. The people are not homogeneous, varying in racial type from section to section. During the inter-bellum period, the population remained almost static, with an increase of only 72,133 from 1931 to 1936. The birth rate also fell sharply (1925: 19.6; 1936-37 annual average: 14.8), but the end of World War II saw a slight uptrend, with an estimated birth rate of about 15.7 in 1945.

AGRICULTURE. The national economy of France is predominantly agricultural. Of the total area of 136,000,000 acres in 1939, 33 percent was devoted to crops, 19 percent to forests, 2.7 percent to vine, and 2 percent to market and other gardening. The vast majority of holdings are small farms worked by the owners. France normally is almost self-sufficient in basic foodstuffs and is the world's largest wine-producing nation.

MAJOR AGRICULTURAL CROPS BY ACREAGE AND VOLUME, 1938

Crop	Acreage	Volume (Ton)
Wheat	12,496,669	10,240,587
Rye	1,558,807	894,076
Barley	1,875,281	1,422,846
Oats	8,015,785	6,015,692
Potatoes	3,519,473	19,085,884
Vines	3,640,780	8,616,679
Sugar Beets	771,455	8,951,007

*Wine production 1,273,976,000 gals.

Other important crops are artichoke, berries, wheat, fodder beets, fruits, hazelnuts and turnips. Silk culture once thrived in the lower Rhone Valley but production fell sharply between wars. Milk, butter, cheese, eggs and poultry have become increasingly important as exports. Livestock in 1939 included 15,622,000 cattle, 9,872,000 sheep and 7,127,000 swine.

Hampered by a heavy drought and numerous mined fields, French agriculture failed to make any substantial recovery in 1945. While accurate statistics were not available, total production was probably the lowest in 5 years. The wheat crop was little more than half of normal, potatoes and sugar beets production declined; it was estimated that cattle had suffered a 35 percent decrease during the war. Wine production was only 666,000,000 gallons but high in quality.

INDUSTRY. Prior to World War II French industry was not as mechanized as that of Britain and Germany, and much of the manufacturing was carried on in small shops. The principal industrial areas were

aris, Artois, Lower Seine and Lyon; the textile industry was concentrated in the north. Leading manufactures in 1938 were iron and steel (pig iron: 7,914,000 metric tons; steel, 6,186,000 metric tons), chemicals, textiles, automobiles, machinery and beet sugar (872,367 metric tons). Shortages of coal, raw materials, new machinery, skilled manpower, and transportation facilities hampered progress in 1945. Production in important activities such as steel, textiles, shoes, and chemicals was still less than half the prewar figures.

TRADE. French prewar foreign trade was surpassed only by Britain, the United States, and Germany. Exports for the last normal trade year, 1938, totaled \$880,000,000 and imports, \$1,323,384,000, for an unfavorable balance of \$443,096,000 offset to some extent by invisible exports, notably heavy tourist expenditures and investments abroad. The principal single exports were iron and steel 6.4 percent, wool and wool waste 4.9 percent, cotton textiles 3.7 percent, metal manufactures 3.7 percent, silk and rayon textiles 3.2 percent, automobiles 2.9 percent, machines and motors 2.9 percent, wines 2.8 percent and hides and skins. Principal single imports were coal and coal products 10.6 percent, petroleum 8.3 percent, wines 7.2 percent, wool and wool waste 6.2 percent, oilseeds 2.2 percent, cotton 5 percent, cereals 4.3 percent, fruits 3.4 percent, machinery and motors 3.3 percent, coffee 2.3 percent, and copper 2 percent. The United States supplied 40 percent of the petroleum, 50 percent of the cotton, and 31 percent of the machines and motors. The major suppliers were French colonies 27 percent (Algeria 9.5 percent), United States 11.4 percent, Britain 7 percent, Belgium 6.9 percent, Germany 6.9 percent, Australia 3.3 percent, Iraq 3 percent, and India 2.8 percent. The chief customers were French colonies 27 percent (Algeria 12.4 percent), Belgium 13.7 percent, Britain 11.6 percent, Switzerland 6.3 percent, Germany 6 percent, United States 5.5 percent, and Netherlands 4 percent.

COMMUNICATIONS. The French merchant marine in 1939 had 11,282 ships and a gross tonnage of 2,952,975. World War II losses amounted to 1,814,000 tons; the deadweight tonnage on Mar. 31, 1946 was 300,000. The chief port is Marseille through which was cleared in 1938 more than 25 percent of the French total.

In 1938 there were 6,016 miles of navigable waterways including canals with a traffic of 49,610,268 tons. There are about 50 inland navigation ports of which Paris, Rouen, and Strasbourg each normally handle over one million tons annually (Paris, over ten million tons). Railway mileage in 1938 totaled 26,427 with a traffic of 272,087,323 tons. Railroads were merged in 1938 into the Société Nationale

des Chemins de Fer Français, of which the government owns the controlling interest. Highway mileage in 1939 was 393,761. Transportation bottlenecks in 1945 were still serious: the Rhine was not open for navigation until late in the year, and canals and railway facilities were seriously damaged (only $\frac{1}{2}$ of the prewar number of locomotives was in use) as were the ports (only 2 million tons cleared the ports in 1945 as compared with 42 million in 1938). Air France, nationalized on Jan. 1, 1946, operates on a world-wide basis, using U. S. aircraft for the most part; nearly 25,000,000 miles were scheduled to be flown in 1946.

FINANCE. The 1945 budget estimated revenues at 190,820,000,000 francs and expenditures at 406,000,000,000 francs. The national debt on Apr. 30, 1944 was 1,417,018 million francs. French investments in the U. S. (1941) totaled \$747,000,000. U. S. lend-lease assistance received by France and her possessions (\$2,377,072,000 or 4.8 percent of the total) was surpassed only by the British Empire and the U. S. S. R. On Dec. 2, 1945 the Bank of France (capital: 182,500,000 francs) and four large private banks were nationalized, and commercial credit was placed under strict government supervision.

TOPOGRAPHY. With maximum length of about 600 miles and width of 550 miles, France is second in size to Russia among Europe's nations. Its coast line is about 1,950 miles. In the Alps on the Italian and Swiss border is France's highest point—Mont Blanc, 15,782 feet. The forest-covered Vosges Mountains also are in the east and the Pyrenees are along the Spanish border. Except for extreme northern France which is part of the Flanders plain, the country may be described as four river basins and a plateau. Three of the streams flow west—the Seine into the English Channel, the Loire into the Atlantic, and the Garonne into the Bay of Biscay. The Rhone flows south into the Mediterranean. For about a hundred miles, the Rhine is France's eastern border. West of the Rhone and northwest of the Garonne lies the Central Plateau covering about 15 percent of France's area, and rising to maximum elevation of 6,188 feet. In the Mediterranean, 115 miles off the southeast coast, is Corsica, the island of Napoleon's birth, with area of 3,367 square miles.

CLIMATE. France's climate is temperate, but varies from long cold winters and hot summers in the northeast, to the subtropical temperature of the Mediterranean coast with very mild winters. With no high western elevations to block moisture laden winds from the Atlantic, all France has adequate rainfall of twenty to thirty inches a year.

MINERALS. French coalfields, most extensive in the northeast, supply about 70

percent of domestic needs. Lorraine, Anjou and Normandy have valuable iron ore deposits. Provence has bauxite. Alsace has potash and oil. Limousin has kaolin, zinc, lead and tar.

MINERALS, 1938 AND ESTIMATED 1944 PRODUCTION

Mineral	1938	1944
Coal (metric tons)	46,502,000	28,000,000
Iron Ore (metric tons)	33,176,000	9,270,000
Bauxite (metric tons)	684,000	665,600
Potash (metric tons)	581,800	.....
Gold (oz.)	87,354	16,000

FORESTS, FISHERIES. France, with over 26,000,000 wooded acres, produces well over \$100,000,000 in forest products including resin, turpentine, timber and nuts, in a normal year. The annual catch of French fishermen is normally second only to Britain, among the nations of Europe. In 1937 the industry employed 130,710 persons on 9,711 sailing boats, 401 steamers and 11,373 motor boats. Cod and sardines were the biggest items in the 1937 catch valued at \$46,804,897. Others were coalfish, herring, whiting, mackerel, tunny, lobster, rays, flounder, sole and oysters.

AFRICA

French Equatorial Africa. Status: Colony. Governor General: Charles Bayardelle. Foreign trade (1938): Exports, \$7,601,000 (69.5% to France, 12.7% to Belgium); imports, \$8,512,000 (35.3% from France, 14.4% from U. S.); chief exports, wood, 38.2%, cotton and wool, 18.5%, gold, 13.6%, palm kernels and oil, 10.3%. Agricultural products: cotton (1945: 45,000 tons), wool, palm kernels and oil, coffee. Minerals: gold (1938: 40,028 oz.), zinc ore. Forest products: timber, rubber, copal gum, wax.

The colony lies in west central Africa, being bordered on the west by the Atlantic, Cameroun, Nigeria, and French West Africa; on the north by Libya; on the east by the Anglo-Egyptian Sudan; and on the southeast and south by the Belgian Congo. The coast, an early slaving center, was first settled by the French in 1839; French hegemony was subsequently extended by exploration and conquest of the native tribes. The territory declared for Free France following the armistice (1940). The governor-general, responsible to the minister of colonies, administers the whole area as a single administrative unit with the aid of an administrative council; each territorial region (Gabun, Middle Congo, Ubangi-Shari, Chad) has a

governor responsible to him. There were in 1944, 6,923 Europeans; most of the Africans are Negroes. There are Arab and Fulani settlements in the Chad region and several Moslem sultanates. Natural resources, both forest and mineral, are vast but relatively unexploited. The country's economic life depends on the forests and its products. Brazzaville, the capital, has one of the most powerful radio transmitters in the world.

Cameroun. Status: Mandate. Capital: Yaoundé (pop. 1944: 200,700). Commissioner: Henri-Pierre Nicolas. Foreign trade (1938): Exports, \$7,252,000 (56.5% to France, 23.4% to Netherlands); imports, \$6,194,000 (26.6% from France, 14.2% from the U. S., 13.3% from Britain); chief exports, cacao 33.6%, palm kernels and oil 25.9%, coffee 9.2%. Agricultural products: Sweet potatoes, millet, macabos, cacao, bananas, palm kernels and oil. Minerals: diamonds, gold, tin. Forest products: timber.

Cameroun is surrounded by French Equatorial Africa except for the Atlantic Ocean on the west and the British Cameroons mandate on the northwest. Cameroun became a German colony (1884) and after the conclusion of World War I was divided as a League mandate between Britain and France, with four fifths of the area going to France. The mandate had political and financial autonomy under a French commissioner, who is nominally responsible to the French government but also a member of the administrative council of French Equatorial Africa. Cameroun joined the Free French movement August 27, 1940. The chief port and commercial center is Douala (1944 pop: 46,840); the administrative center, Yaoundé, is located on the central plateau. In 1942 there were 3,227 Europeans.

Algeria (French colony)

(L'Algérie)

Area: 851,078 square miles.

Population (est. 1939): 7,600,000.

Density per square mile: 8.9.

Governor General: M. Yves Chataigneau.

Principal cities (census 1936): Algiers, 252,300 (capital); Oran, 194,746 (seaport); Constantine, 106,830 (trading center); Bône, 83,275 (seaport, phosphates).

Monetary unit: French franc.

Racial stock (census 1936): Native, 86.3% French, 11.7%; Other Europeans, 1.9%.

Languages: Arabic, French.

Religions: Mohammedan (natives); Roman Catholic; Jewish.

Algeria, more than three times the size of Texas and situated on the northern bulge of Africa, became far more than a big French colony during World War I. After American and British troops occu-

ied it following the landings of Nov. 8, 1942, it became the headquarters of the provisional French government of General Charles de Gaulle until the summer of 1944. For many months during that period it was the headquarters of the Allied Expeditionary Force.

In ancient times, Algeria became a Roman colony after the fall of Carthage in 46 B. C., and then was overrun by the Arabs in the 7th, 11th and 12th centuries. In the 13th century it became one of the three kingdoms founded on the ruins of the old Almohade Empire. Following a brief Spanish occupation, it went under Turkish suzerainty in 1518. For 300 years thereafter Algiers was the headquarters of the notorious Barbary pirates who preyed on Mediterranean shipping. The French ended Turkish rule by taking the city in 1830 but it was not until 1847 that they were able to suppress a holy war instigated in 1839 by Abd-el-Kader.

French policy for a time vacillated between complete assimilation of Algeria as part of France, and a decentralized administration under a governor general. In 1896 the idea of assimilation was abandoned. After France fell in 1940, Algerian government officials were loyal to Vichy, but their control was ended by the Allied invasion of the African coast in 1942.

In May and June of 1945 Algeria experienced serious disturbances instigated by the Arab nationalist movement. Severe casualties were caused.

In effect, Algeria is part of France. It is represented in the Constituent Assembly by twenty-six deputies, and it is one of the ten military districts of France, with both French and natives subject to military service. The governor general is responsible to the Interior, rather than Colonial, Ministry in the French Cabinet.

In 1938 the University of Algiers had 248 students. Primary and secondary schools for Europeans are on French lines. Most natives do not go beyond the primary grades. The knowledge and use of French is spread widely among the natives.

The area under cultivation is about 25,000,000 acres, over 20 percent of which is owned by European farmers. The highly fertile area in the vicinity of the coast is mostly owned by Europeans. The chief crops in 1938 were: wheat, 1,048,287 tons; barley, 647,160 tons; and oats, 174,274 tons. Algeria is a leading wine producer with almost 4 percent of the cultivated area, mostly in Oran, devoted to vines. Average annual wine production 1931-42 was 464,000,000 gallons (1945: 285,000,000 gallons). The olive tree is widespread; the average annual yield is 2,800,000 gallons. Tobacco, corn, vegetables, flax, silk, figs, and dates are also produced. Much of the area is more adapted to grazing, and in 1938 there

were 5,965,133 sheep, 2,736,544 goats, 789,316 cattle and 169,876 camels.

European industries include those dependent on crops, such as oil mills, distilleries and flour mills, also the making of leather, tobacco and matches. There are also small native industries, particularly the traditional carpet weaving.

Exports in 1938 totaled \$162,290,000 of which 83.5 percent went to France. Imports were \$143,766,000, of which 75.1 percent came from France. Wines comprised 50.6 percent of the exports (441,356,000 gallons, almost all to France). Others were fruits, iron ore, meal, and olive oil. The chief imports were cotton cloth, sugar, machinery and apparatus, metal manufactures, and vehicles. There is complete reciprocity between France and Algeria in customs dues.

Algeria has 2,734 miles of railway. A central line runs from the Moroccan to the Tunisian frontiers with branches north to all the ports and south into the Southern Territories. There is an excellent network of roads of more than 30,000 miles, and motor transport is well developed, including regular passenger and freight lines across the Sahara. In 1938 Algiers handled 3,813,913 tons of cargo; Oran, 3,358,613 tons; and Bone, 2,916,049 tons. Only French ships may normally trade between France and Algeria.

Revenue in 1944 was estimated at 4,263,863,652 francs; expenditure, 4,619,286,835 francs. France pays Algeria's military and naval expenses, but Algeria makes a war contribution of 6 percent of its budget.

Algeria fronts on the Mediterranean for 684 miles. Northern Algeria—80,252 square miles—extends inland for 185 to 250 miles. South of it is the big (770,826 square miles) economically unimportant Southern Territories. Low plains cover small areas near the coast but 68 percent of Algeria is a plateau between 2,600 and 5,200 feet above sea level. The region between the Sahara and the Mediterranean reaches a high point of 7,641 feet.

Most of the streams are periodic with the rains. The Chelif is the principal river, over 435 miles long. On the Saharan slopes, the oases or the hot sands absorb the streams as soon as they leave the mountain ridges.

Rainfall averages 30 to 40 inches on the coast, and decreases to virtually none on the Sahara. On the coast, temperatures average about 52° in winter, 77° in summer. Inland, the winter average is about 40° and summer about 81°, although the Sahara summer average is from 95° to 105°.

Algeria is a leading producer of phosphates, 644,241 tons in 1939. Iron ore of good quality, 3,422,682 tons in 1939, is found near the Tunisian frontier. Zinc, lead and salt are also important minerals;

and small amounts of oil and coal are produced.

Forests, mostly scrub, cover about 6,000,-000 acres. The cork output in 1938 was 24,800 tons. In the same year, alfalfa covered 10,000,000 acres on the plains and yielded 165,345 tons for paper pulp, while the dwarf palm produced 55,115 tons of fiber. The 1936 fish catch in the Mediterranean was valued at \$3,164,071, and included anchovies, sardines, shellfish, sprat and tuna.

Morocco

(Maroc)

Area: Fr. prot., 153,870 square miles; Span. prot., 8,706 square miles; Tangier, 232 square miles.

Population: Fr. prot., 8,000,000 (est. 1941); Span. prot., 992,000 (est. 1944); Tangier, 80,-000 (est. 1938).

Density per square mile: Fr. prot., 51.9; Span. prot., 92.5; Tangier, 344.8.

Sultan: Sidi Mohammed ben Youssef.

French Resident General: M. Gabriel Puaux.

Spanish High Commissioner: Gen. Juan Varela.

Principal cities (est. 1941): Casablanca, 453,-000 (chief seaport); (census 1936) Marrakech, 190,314 (trading center); Fez, 144,424 (commercial center); Rabat, 171,600 (French administrative center).

Monetary units: French franc; Spanish peseta.

Racial stock: Moroccan, French, Spanish, Italian.

Languages: Arabic, French, Spanish.

Religions: Mohammedan, Jewish, Roman Catholic.

HISTORY. Morocco, which is about the size of California, is just south of Spain and looks out on the Atlantic from the northwest shoulder of Africa. It was once the home of aggressors—the Berbers—who helped the Arabs invade Spain in 711, and then revolted against the Arabs and gradually won control of all Spain for a time after 739.

The country was ruled, successively, by various Berber, Sharifian and Hassani dynasties and maintained regular commercial relations with Europe, even during the 17th and 18th centuries when it was the headquarters of the famous Sali pirates. In the 19th century border clashes with the French and Spanish became frequent. Finally, in 1904, France and Spain divided Morocco into zones of French and Spanish influence, and these were established as formal protectorates in 1912. The Tangier Statute, signed by Britain, France and Spain in 1925, created an international zone at the port of Tangier, permanently neutralized and de-militarized. In World War II, Spain occupied the zone ostensibly to insure order, but she had to withdraw in 1945 and the international rule was re-established. The French zone in Morocco was under the Vichy government of France

in World War II but, three days after the Allied landing in North Africa in 1942 it came under Allied control.

GOVERNMENT. Morocco nominally is an absolute monarchy under a sultan, but actually the French resident general at Rabat, and the Spanish high commissioner at Teutun, direct Moroccan policies to a large extent. The sultan—the present one is Sidi Mohammed whose reign began Nov. 18, 1927—lives in the French zone and delegates authority to representatives in the Spanish zone and Tangier.

SOCIAL AND ECONOMIC CONDITION. Most of the natives are illiterate; some rudimentary education in Koranic schools or state maintained institutions. Education on European lines is provided in both zones for the white population.

The natives are Berbers, roughly divided by customs and way of life into three groups—the Riff people along the coast, the central people in the mid-Atlas Mountains, and the southern people in the high Atlas and Sus. There is a large Jewish population. Most of the Europeans live in the cities.

Morocco is essentially agricultural. In the French zone, about 25,000,000 acres are cultivated, with 1939 production of wheat coming to 1,163,927 tons; of barley, 2,345,694 tons. Corn, beans, peas, hemp, sorghum, citrus fruit and dates also are raised. The olive oil yield in 1943 was 8,000 tons. In 1942 the native stock raisers kept 12,000,000 sheep, 6,950,000 goats, 2,155,000 cattle and 164,200 camels.

In the Spanish zone agriculture is undeveloped, but it has potential importance under irrigation. Tangier's food raising is insufficient to meet its needs.

Manufacturing industries introduced by Europeans, mostly small scale, include beverage, chemical, fruit, leather, stone and textile. Native industries include carpet weaving and the making of Turkish slippers.

Exports from the French zone in 1938 totaled \$19,463,000 of which 45 percent went to France. Imports were \$61,212,000 of which 34.5 percent came from France. Chief exports were phosphates, wheat, fish, wool and eggs. Imports included sugar, mineral oil, cotton and rayon cloth and machinery. Exports from the Spanish zone in 1938 totaled \$3,984,000 and imports, \$6,896,000. A large proportion of the trade was carried on with Spain. Major exports were cattle, eggs, and iron ore; imports included flour, sugar, tea, wine and textiles. Exports from Tangier for the period October–December, 1945, after its return to international control, were \$424,000; imports \$1,200,000.

Railroad mileage in 1938 totaled 1,120 in the French zone, 71 in the Spanish zone.

and 11 in Tangier. Highway mileage was 636 in the French zone, 1,383 in the Spanish zone and 65 in Tangier. Casablanca, which handles about 80 percent of the French zone trade, has perhaps the largest artificial port in the world.

The importance of Tangier, once Morocco's first port, has declined under the international regime and its harbor works are obsolete. Two radio relay stations for messages between the United States and Russia were completed at Tangier in April 1946.

Revenues in the French zone in 1944 were estimated at 2,604,982,000 francs; expenditures, 2,604,658,000 francs. The budget for the Spanish zone in 1938 balanced at 11,785,245 pesetas. The 1946 budget of the international administration at Tangier provided for receipts of 360,000,000 francs and expenditures of 351,000,000 francs. Custom receipts provide most of the revenue.

NATURAL FEATURES AND RESOURCES. At Tangier, Morocco looks across the Strait of Gibraltar at Spain. On the Atlantic coast, there is a fertile plain; the Mediterranean coast is mountainous, making most of the Spanish zone a rugged area. The Atlas Mountains, running northeastward from the southern part of the country to the Algerian frontier, average 11,000 feet of elevation and terminate in Morocco as the high n' Tagharat, 15,000 feet high. Morocco's coastal climate is equable, but inland are increasingly greater extremes of cold and heat.

Exploitation of Spanish Morocco's almost exhaustible deposits of phosphate is a state monopoly and produced a total of 798,500 tons in 1945. Other major minerals, with 1938 production, were: coal, 135,000 tons; cobalt, 794 tons; iron ore, 293,000 tons; manganese ore, 95,456 tons; and polybdenum, tin, zinc and lead. Iron ore, 1,478,910 tons in 1938—is the chief mineral of the Spanish zone; others are antimony and manganese.

The French zone produced 25,573 tons of cork in 1938 from the densely forested northern Atlas slopes. Gums and tannins also are produced by the French; and cork, wax and charcoal, by the Spanish. Waters off both coasts are rich fisheries. In 1938, a total of 15,237 tons of canned tuna valued at \$2,601,025 was exported from the French zone, and 230 tons from Tangier.

Because of its strategic location on the Mediterranean shores and because of its very valuable mineral resources, Morocco has been the scene of imperial rivalry throughout the ages. These rivalries among countries such as France, Germany and Spain provoked crises almost resulting in wars. Among these was the 1905 crisis, settled at Algeciras in Germany's favor and the 1911 affair which gave France outright control of most of Morocco.

Tunisia (French protectorate)

Area: 48,300 square miles.

Population (est. 1940): 2,730,000.

Density per square mile: 56.5.

Ruler (Bey): Sidi Mohammed al-Amini.

French Resident General: Gen. Charles Mast.

Principal cities (census 1936): Tunis, 219,578 (capital); Sfax, 43,333 (phosphate port); Bizerte, 28,468 (seaport and naval base); Sousse, 28,465 (seaport).

Monetary unit: French franc.

Racial stock (1936): Arab and Bedouin, 89.6%; French, 5.4%; Italian, 4.6%; Others, .4%.

Languages: Arabic, French, Italian.

Religion: Predominantly Mohammedan.

Tunisia was settled by the Phoenicians and Carthaginians in ancient times. Except for an interval of Vandal conquest in 439–533 A. D., it was part of the Roman Empire until the Arab conquest of 648–49. Then it was ruled by various Arab or Moorish dynasties until the Turks took it in 1570. The practice was for the occupation troops to elect the individual ruler. The founder of the present dynasty, Hussein ben 'Ali, was so elected in 1705 and later succeeded in making the office hereditary, while subject to nominal Turkish sovereignty.

Throughout much of its history, Tunisia was essentially a pirate state, preying on Mediterranean shipping. In modern times, Italy became predominant economically in the area, but after French troops occupied the area in 1881, the reigning Bey signed a treaty acknowledging a French protectorate.

Following the Allied landings in North Africa in 1942 in World War II, Tunisia became a battleground with the Axis forces pinched between the British 8th Army from Egypt, and the U. S., British and French forces from Algeria. The Axis units surrendered in May, 1943 and Tunisia was turned over to the De Gaulle government. On May 15, 1943, the reigning Bey, Sidi Mohammed al-Mounsaf, was removed and replaced by his cousin, the present ruler.

In government, although the Bey is theoretically sovereign, a French resident general actually controls all military and civil affairs, assisted by a cabinet of eight French and three Tunisian ministers. Local administration is under native officials under the close supervision of the French. The Southern Territory is subject to military administration. Tunisian courts hear cases involving natives only, and French courts hear all other cases. French occupation forces number about 25,000 in addition to native regiments and the Foreign Legion.

In 1937 Tunisia's 492 public and thirty-five private schools had 96,520 pupils, about a third of them French and Italian. The Great Mosque at Tunis is a Moslem Uni-

versity, and there are 1,338 Moslem private schools. Tunisia's population is concentrated in the cities and on the coast. There are only about 100,000 nomads. The Moslem majority is mostly Berber, mixed with Arab.

Agriculture is the chief industry. Over a quarter of the arable land is in wheat, of which 1939 production was 546,741 tons. Other important crops are barley, oats, corn, sorghum, beans and peas. Average annual wine production is about 38,000,000 gallons. Olive oil production in 1938 was 84,877 tons. The Cape Bon region is largely devoted to citrus fruits. The southern oases yielded about 25,000 tons of dates in 1938. Tunisia exports over 50,000 sheep and 4,000 tons of wool a year. The 1939 livestock census showed 2,687,081 sheep, 1,406,827 goats, 478,543 cattle, 152,226 camels and about 5,000,000 fowl.

Major industries include flour milling, oil refining, lead smelting and distilling. Native industries flourish, including the spinning and weaving of wool, and the making of pottery and leather goods.

Tunis, Algeria and France are under a single customs union for a number of products. Exports in 1939 totaled \$31,772,000, of which 62 percent went to France. They included olive oil, wine, wheat, phosphates, iron ore, lead and esparto grass. Imports were \$37,222,000, of which 66 percent came from France. The leading items were cotton cloth, machinery, metal products, autos, rice, sugar and coal.

Tunisia had 4,800 miles of roads and 1,310 miles of railway in 1938. Tunis, Bizerte, Sousse and Sfax are the principal ports, and eighteen others are of minor importance. Total cargo handled in 1938 was 4,060,000 metric tons.

Ordinary revenue for 1946 was estimated at 4,201,760,000 francs, and expenditures about the same. There was an extraordinary budget balanced at 6,475,420,000 francs for public works, education and agricultural research. State monopolies, including tobacco, provide about 25 percent of the revenue and indirect taxes, about 50 percent. The public debt in 1938 was \$29,057,096.

Tunisia, at the northernmost bulge of Africa, thrusts out toward Sicily to mark the division between the eastern and western Mediterranean. It is mountainous in the north, covered by plains in the east, and projects southward to the Sahara area. Its principal river, the Medjera, in the north, is 228 miles long. The climate is Mediterranean with temperature extremes at Tunis of 52.7 and 79.2 degrees. Rainfall ranges from 24 inches in the north to less than eight inches in the south.

Tunisia has almost inexhaustible deposits of phosphates mined principally in

the Gafsa and Kef regions. Production in 1939 was 1,772,548 tons. Its iron ore 842,963 tons in 1939—is of good quality. Other minerals are lead, zinc, mercury, manganese, copper, salt and the poor grade lignite of Cape Bon.

Products derived in 1938 from Tunisia 2,500,000 acres of forests included 3,636,000 board feet of lumber, and 4,517 tons of mine props and cork. Alfa—127,000 tons in 1938—is exported, mainly to England, for the making of paper pulp. About 15,000 Tunisians work at fishing. Their 1939 catch totaled 12,110 tons valued at about \$1,300,000. Annual sponge production averages 125,000 tons.

French West Africa (Colony)

(L'Afrique occidentale française)

Area: 1,814,808 square miles.

Population (est. 1941): 15,582,535.

Density per square mile: 8.6.

Governor-general: Pierre Charles Cournaire.

Principal cities (est. 1938): Dakar, 100,000 (capital, chief port); St. Louis, 33,589.

Monetary unit: French franc.

Racial stock (1941): Native except 41,500 French and 8,689 other Europeans.

Languages: French, native tongues.

Religions: Mohammedan, Pagan.

The St. Louis Colony, founded in 1626 at the mouth of the Senegal River, was probably the first permanent white settlement in French West Africa in which the French established themselves, largely for the purpose of pursuing the slave trade. Little progress inland was made until after 1854 when a scheme was conceived to link the upper Senegal with the upper Niger. After 1876 the coast settlements extended themselves steadily into the interior through a series of missionary and economic campaigns. In 1895 the colony, French West Africa was formed under the Governor-general by the unification of its various components.

The Governor-general of the colony is appointed by the French government and is assisted by a legislative council. Governors responsible to him administer the eight constituent colonies—Senegal, French Guinea, Ivory Coast, Dahomey, Dakar, French Sudan, Mauretania and Niger. Each of these has considerable autonomy, with the central colonial government supervising services common to all. The area is represented in the French National Assembly.

In 1936-37, the colony had 306 rural schools with 24,931 pupils; eighty-four secondary schools with 21,941 pupils; twenty-two urban schools with 8,037 pupils; twenty secondary schools, in Dakar and St. Louis, had 843 pupils; and seven Moslem schools

had 350 pupils. Total attendance of seventy-three private schools was 10,848.

No racial unity exists in French West Africa, and there is great variation of physique, manner, custom and language. Tribes not Negroid include the Saharans, Moors, Tuaregs and Fulbe. About half the population normally is Moslem, but a number of tribes have remained spirit worshippers.

Agriculture has expanded rapidly in recent years. Millet, rice and maize are the principal food crops, and vegetable oils are a chief commercial product. Groundnuts (788,916 tons in 1937) are cultivated in Senegal, and palm kernels and oil are produced in Dahomey and Ivory Coast, along with coffee, cotton, cacao and bananas. Stock raising is important in French Sudan and Mauretania, relatively dry districts in the northern part of the colony. Manufacturing is undeveloped except for small native industries.

Imports in 1942, with France supplying nearly 75 percent, totaled \$37,940,000, including cotton cloth, metal products, vehicles, machinery, wine, beer and spirits. Senegal and Ivory Coast account for over half the exports which totaled \$30,237,000 in 1942 and included groundnuts, coffee, bananas, cotton, cacao, palm kernels and oil, with France taking about 75 percent of the total.

The middle Niger and lower Senegal rivers are navigable but French West Africa's railways (2,314 miles in 1938) are more important as interior communications. Dakar, with the best harbor on the west African coast, is the principal port and also an important stop on international air routes between South America and Europe. There are several other good ports.

The estimated budget for 1943 balanced at 3,017,818,500 francs, about a third of which was the local budget total of the eight component colonies.

The colony, a sixth of Africa and half as big as Europe, is, generally, a plateau broken by two mountain ranges. The Futa Djallon, from 2,300 to 4,900 feet in elevation, parallels the coast for about 430 miles, and Mount Nimba, on the Liberian border, rises 5,250 feet. There are also mountainous regions in the Sahara districts to the north. The Niger, 2,550 miles long, the third longest in Africa, is the principal river. At about half its course it becomes a wide inland delta, subject to floods in the rainy seasons, and covers a wet area eighty-five miles wide at Mopti. Numerous other rivers include the Senegal, 1,037 miles long. Gold, found in alluvial deposits in Senegal and in veins in the Ivory Coast, is the only important mineral. Output in 1938 was 127,220 ounces. Timber and precious woods are important, es-

pecially in Ivory Coast. Gum from the dry acacia resin is a leading product in Mauretania. Main forest products in 1937, in short tons, included: timber, 22,155; mahogany logs, 28,609; gum arabic, 5,688; shea butter (a solid, white fat obtained from the seeds of the shea tree) and nuts, 6,779; kapok, 1,219; and beeswax, 635. Some ivory and rubber is exported.

Togo. Status: Mandate. **Capital:** Lome (pop. 1938: 14,380). **Commissioner:** Jean Noutary. **Foreign trade (1938):** Exports \$1,915,000 (66.4% to France, 8.5% to Britain); imports \$2,123,000 (22.8% from Britain, 16.7% from France, 11.3% from Japan); chief exports, cacao 28.7%, palm kernels 16.1%, corn 16%, cotton 11%, copra 6.4%. **Agricultural products:** cacao, palm kernels and oil, cotton, copra, coffee. **Minerals:** iron ore. **Forest products:** dye woods, oil palms.

Togo, a part of the former Slave Coast, lies between the British Gold Coast colony and French West Africa. Established as a German colony (1884), the area was divided as a League mandate by France and Britain at the end of World War I, with France obtaining two thirds of the total area. It is administered by a commissioner responsible to the French government assisted by an economic and financial council composed of officials, merchants, and nine elected native delegates. Agriculture and grazing are the chief industries. In 1941, there were 631 Europeans. The coast line, only 32 miles long, is low, sandy and without harbors.

French Somaliland. Status: Colony. **Capital:** Djibouti (pop. 1938: 20,000). **Governor:** M. Chavet. **Foreign trade (1943):** Exports, 157,000,000 francs; imports, 192,000,000 francs; chief exports, coffee, hides, salt. **Mineral:** salt.

French Somaliland lies at the southern entrance to the Red Sea on the Gulf of Tajura. The area was acquired by France between 1883 and 1887 by treaties with the Somali sultans, although posts on the coast had been acquired in 1864. The only importance of the small, largely arid and sparsely populated region lies in the port of Djibouti, the main artery of trade with Ethiopia by virtue of the Djibouti-Addis Ababa railway. The colony is administered by a governor, responsible to the French government and assisted by an advisory council. It adhered to the Free French movement by an agreement initiated in December 1942. In 1944 there were 629 Europeans.

Madagascar. Status: Colony. **Capital:** Tananarive (Antananarivo) (pop. 1936: 126,515). **Governor General:** Pierre de Saint-Mart. **Foreign trade (1938):** Imports, \$17,347,000 (75.4% from France, 5.3% from the U. S.); exports, \$23,583,000 (78.4% to France, 5.6% to Britain); chief exports,

coffee, 31.9%, vanilla, 9.1%, meat, 7%, corn, 5.2%, sugar, 4.4%, cloves, 4.4%. **Agricultural products (1939):** rice (485,-012 tons), coffee (32,518 tons), sugar (262,-347 tons), manioc, bananas, corn, coconuts, sweet potatoes. **Minerals (1938):** gold (13,770 oz.), graphite (15,873 tons), mica, phosphates. **Forest products:** gum, medicinal plants, rubber, tannins, dyewoods.

Madagascar lies off the southeast coast of Africa and is the fourth largest island in the world. It has a length of 995 miles and an average width of 250 miles. Discovered by the Portuguese navigator Diego Diaz (1500), it remained independent under native rulers until 1885, when it came under French protection. French troops conquered the island (1895) and it became a French colony (1896). The last native ruler, Queen Ranavalona III, was exiled. British troops landed on the island May 5, 1942, an armistice with French forces was signed November 5, 1942. The island is administered by a governor-general responsible to the minister of colonies, assisted by a representative council of 60, half of whom are elected.

The chief occupations are cattle raising (5,000,000 cattle in 1936) and agriculture; there are several food-processing and textile plants. The chief port is Tamatave on the east coast; the capital, Tananarive, is located on the central plateau. In 1936 there were 25,255 French residents and 14,343 other nonnatives including many Hindus, Arabs and other Asiatics. The natives, collectively known as Malagasy, are divided into several tribes. Outlying dependencies include the archipelago of the Comoro islands and the islands of Europa, Juan de Novo, Barren, Bassas da India, Glorieuses, Amsterdam, St. Paul and Kerguelen.

Réunion (Bourbon). Status: Colony. **Capital:** St. Denis (pop. 1941: 32,637). **Governor:** J. Capagorry. **Foreign trade (1943):** Exports, 18,923,000 francs; imports, 181,674,000 francs; chief exports, sugar, 50%, spirits, 26%. **Agricultural products:** sugar, vanilla, cocoa, coffee, maize, manioc.

Discovered by Portuguese navigators in the 16th century, the island, then uninhabited, was taken as a French possession in 1638. Regular colonization began in 1664. The governor, responsible to the minister of colonies, is assisted by a locally elected council with wide powers; the colony is also represented in the French legislature. A bill was passed March 15, 1946, making Réunion a *département* of Metropolitan France as of Jan. 1, 1947. There is no indigenous population. About three-quarters of the inhabitants are of European origin; the remainder are Creoles, mulattoes, Negroes, Indians and other Asiatics. Tropical cyclones of hurricane variety are frequent during the change of seasons; one of the most recent (Jan.

1945) caused damage of over \$1,000,000. Occasionally a "raz de marée" (tidal wave) does great damage. Sugar-cane cultivation and the production of spirits (rum) are the principal occupations. The chief port is Pointe des Galets.

WESTERN HEMISPHERE

St. Pierre and Miquelon. Status: Colony. **Capital:** St. Pierre. **Administrator:** Pierre Garrouste. **Foreign trade (1939):** Exports \$343,000; imports, \$596,000; chief exports cod and other fish products.

The sole remnant of the French colonial empire in North America, the islands were first occupied by the French in 1660. Their only importance is due to their proximity to the Grand Banks (they lie 10 miles south of Newfoundland) which makes them the center of the French Atlantic fisheries.

French Guiana (including Inini). Status: Colony. **Capital:** Cayenne (pop. 1936: 11,704). **Governor:** M. Surlemont. **Foreign trade (1938):** Exports, \$926,000; imports, \$1,334,000. **Agricultural products:** bananas, cocoa, corn, manioc, rice, sugarcane. **Mineral:** gold (1940: 38,000 oz.).

The colony, lying north of the Amazon River on the east coast of South America, was first settled in 1626. Penal settlements embracing the area around the mouth of the Maroni River and the Iles du Salut (including Devil's Island), were founded in 1852. During World War II the colony at first adhered to the Vichy government but the Free French took over in March 1943. The governor, responsible to the minister of colonies, is assisted by an elected council. A bill was passed March 15, 1946, making French Guiana a *département* of Metropolitan France as of January 1, 1947. The colony elects one delegate to the French legislature. The large and scantily populated territory of Inini in the hinterland is administered separately by the governor. Economic development is extremely backward. Gold is by far the chief export.

Guadeloupe. Status: Colony. **Capital:** Basse-Terre (pop. 1938: 13,638). **Governor:** Maurice Bertaut. **Foreign trade (1938):** Exports \$8,532,000 (to France 97.5%), imports \$7,212,000 (from France 63.2%, from the U. S. 16.9%); chief exports, sugar 42.3%, bananas 29.1%, rum 24.2%. **Agricultural products (1938):** sugar (49,900 tons), bananas (55,431 tons), coffee, cacao, manioc, tobacco, vanilla.

Guadeloupe, lying in the West Indies about 350 miles southeast of Puerto Rico, was discovered by Columbus (1493). French colonization began in 1635. The colony, under a governor and elected council and represented in the French legi-

ture, was to become a *département* of Metropolitan France on January 1, 1947. It consists of two large islands, separated by a narrow arm of the sea, and several outlying smaller islands. Most of the population is Negro and mulatto. The largest city and chief port is Pointe-à-Pitre (pop. 1938: 15,511). About half the cultivated area is devoted to sugar cane. The manufacturing of rum and spirits is the principal industry.

Martinique. Status: Colony. **Capital:** Fort-de-France (pop. 1936: 52,051). **Governor:** Georges Parisot. **Foreign trade (1937):** Exports, \$9,347,000 (99% to France); imports, \$8,647,000 (68.7% from France, 14.3% from the U. S.); chief exports, sugar 48.2%, rum 26%, bananas 13.3%. **Agricultural products (1940):** sugar (7,000 tons), bananas, pineapples, cocoa, coffee. **Manufactures:** rum, sugar refining.

Martinique, lying in the Lesser Antilles about 300 miles north of Venezuela, was discovered by Columbus (1502) and was taken for France in 1635. Following the mistice (1940) it had a semiautonomous status under the High Commissioner, Robert, until 1943, when he relinquished his authority to the Free French. The colony, administered by a governor assisted by an elected council, and represented in the French legislature, was to become a *département* of Metropolitan France on January 1, 1947. The population is mainly Negro and mulatto. Most of the arable land is devoted to sugar cultivation. Fort-de-France, the capital and chief commercial center, has an excellent harbor.

ASIA

French India. Status: Colony. **Capital:** Pondichéry (pop. 1941: 53,101). **Governor:** Louis Bonvin. **Foreign trade (1938):** Exports, \$6,492,000; imports, \$2,508,000; chief exports, groundnuts 67.3%, cotton textiles 15.5%. **Agricultural products:** groundnuts, manioc, rice, onions.

French India is a collective name for the scattered French possessions in India on the Caromandel coast, Pondichéry, Arikal and Yanaon; on the Malabar coast, Mahé and Calicut; and in Bengal, Wandernagor. The chief possession is Pondichéry, founded by the French in 174. The governor, responsible to the minister of colonies, is assisted by a private council. Over 90% of the population is Hindu.

OCEANIA

French Pacific Settlements. Status: Colony. **Capital:** Papeete (Tahiti) (pop. 1941: 16,14). **Governor:** Col. Orsell. **Foreign trade (1940)** Exports, \$996,000 (26% to France, 36% to Japan, 25% to the U. S.);

imports, \$1,094,000 (25.5% from France, 31.8% from the U. S., 16.5% from Australia); chief exports, vanilla 40.8%, phosphate 36%, copra 14.5%. **Agricultural products:** coconuts, sugar, vanilla, tobacco. **Minerals:** phosphate (1940: 190,892 tons).

The term French Pacific Settlements is applied to the scattered French possessions in the eastern Pacific—Gambier (12 sq. mi.), Makatea (10 sq. mi.), Marquesas Is. (492 sq. mi.), Rapa (15 sq. mi.), Rurutu and Runatara, Society Is. (636 sq. mi.), Tuamotu Archipelago (322 sq. mi.), and Tubuai and Raiavavae (48 sq. mi.)—which were organized into a single colony in 1903. The appointed governor is assisted by an administrative council. The principal and most populous island—Tahiti, in the Society group (pop. 1941: 23,133)—was claimed as French in 1768. Plebiscites conducted in September 1940 gave support to the former Fighting French movement (Gen. de Gaulle). The natives are mostly Polynesians; over one quarter of the population (12,235) is nonnative, of whom 6,421 are French.

New Caledonia and Dependencies. Status: Colony. **Capital:** Nouméa (pop. 1936: 11,108). **Governor:** J. Tallec (also French commissioner general in the Pacific). **Foreign trade (1938):** Exports, \$4,215,000 (46.9% to France, 33.6% to Belgium); imports, \$4,564,000 (35.5% from France, 30.8% from Australia); chief exports, nickel 66%, chrome ore 14.8%, coffee 8.2%, copra 2.9%, shells 2.7%. **Agricultural products:** coffee, copra, corn, cotton, manioc, rice, tobacco. **Minerals (1944):** nickel (6,400 metric tons), chromite (50,000 metric tons). **Sea products:** mother-of-pearl.

New Caledonia (6,221 sq. mi.), lying about 1,000 miles northeast of Sydney, Australia, was discovered by Captain Cook in 1774 and annexed by France in 1853. The government, in the hands of an appointed governor and an elective council, also administers the Isle of Pines, the Wallis Archipelago, the Loyalty Islands, the Huon Islands, Futuna and Alofi with a total area of 979 sq. mi. The colony—taken over in the summer of 1940 by the Free French after a bloodless revolution—is one of the richest of the Pacific islands in mineral resources, particularly nickel and chrome ore. The natives are Melanesians; about one third of the population is white. A French penal colony was established in the 19th century.

New Hebrides. Status: Anglo-French condominium. **Capital:** Vila. **Foreign trade (1938):** Exports, \$588,000 (97.9% to France); imports, \$547,000 (49% from Australia, 26% from France); chief exports, copra 62.3%, cocoa 23.6%. **Agricultural products:** coconuts, cocoa, coffee. **Sea products:** Trochus and burghaus shell.

The New Hebrides, under joint Anglo-French administration (1914), lie slightly northeast of New Caledonia. The islands, about 40 in number, acceded to the Free French movement after a plebiscite (July 1940). Most of the natives are Melanesians of mixed blood; there were (1939) 212 British, 687 French and 2,282 Asiatic residents. The largest island is Espiritu Santo (875 sq. mi.). The French and British high commissioners in the Pacific are represented by resident commissioners.

Germany

Area (est. 1945): 143,243 square miles.

Population (est. 1945): 63,200,000.

Density per square mile: 441.2.

Allied Control Council: General Joseph T. McNarney (U. S. A.); General Ivan Sokolovsky (U. S. S. R.); Marshal of the RAF Sir Sholto Douglas (United Kingdom); General Joseph Koenig (France).

Principal cities (census 1939): Berlin, 4,332,242 (capital); Hamburg*, 1,682,220 (chief port); Munich*, 828,235 (Bavarian capital); Cologne*, 768,426 (transportation center); Leipzig†, 701,606 (trading, publishing center); Essen*, 659,871 (Krupp steel works); Dresden†, 625,174 (railway center, Elbe port); Frankfurt-am-Main*, 546,649 (manufacturing).

Monetary unit: German mark.

Racial stock: German.

Language: German.

Religions (1933): Protestant, 62.7%; Roman Catholic, 32.5%; Jewish, 0.7%; Others, 4.1%.

*British occupation zone. †U. S. zone. ‡Soviet zone.

HISTORY. In the days of Julius Caesar the territory that is now Germany was inhabited by barbarous tribes that came originally perhaps from Central Asia. One of these Germanic tribes, the Franks, rose to supremacy in western Europe under Charlemagne who was crowned Holy Roman Emperor in 800 A. D. German history may be said to date from the treaty of Verdun (843) when Charlemagne's lands east of the Rhine were conceded to the German prince Louis. Successive regimes were marked by civil strife among the many feudal principalities as well as by conflicts with the popes and Italian princes. For several centuries, almost without exception, the German kings were also heads of the Holy Roman Empire.

Relations between state and Church were changed by the Reformation which began with Martin Luther's ninety-five theses against indulgences and came to a head in 1547 when Charles V led his forces against the Protestant League at Mühlberg. Freedom of worship was obtained by the Peace of Augsburg (1555) but a Counter Reformation took place later and a dispute over the succession to the Bohemian throne brought on the Thirty Years' War (1618-48) which disintegrated the empire and

left it divided into hundreds of small principalities virtually independent of the emperor. Meanwhile, Prussia was developed into a province of considerable strength. Frederick the Great (1740-86) reorganized the Prussian army and defeated Maria Theresa of Austria in a struggle over Silesia. The conflict with revolutionary France hastened the disintegration of the empire and in 1806 Francis II of Austria laid down the Imperial crown. With the defeat of Napoleon at Waterloo (1815), the struggle between Austria and Prussia for supremacy in Germany continued, reaching its climax in the defeat of Austria in the Seven Weeks' War (1866) and the formation of the Prussian-dominated North German Confederation (1867).

At the close of the victorious war with France (1870-71) William I, King of Prussia was crowned Emperor of Germany (Jan. 18, 1871). Under the guidance of the Imperial Chancellor, Prince Bismarck, Germany took a new place in world affairs, the same time expanding her foreign trade and home industry rapidly. The Triple Alliance was formed with Austria and Italy in 1883. However, upon the accession of William II (1888-1918), Bismarck was dismissed and Russia was alienated. International rivalry was intensified in the early years of the 20th century, reaching its climax in World War I in which Germany, supporting Austria-Hungary's demands on Serbia, suffered final defeat. By the terms of the Treaty of Versailles (1919) Germany lost about 27,000 square miles of territory including all her foreign colonies, Alsace-Lorraine, northern Schleswig, Eupen-Mosmedy and upper Silesia, and considerable areas in the east. William II abdicated (Nov. 9, 1918) and a federal republic was organized under the Constitution adopted at Weimar in 1919. The Constitution was attacked by both the Right and Left. Several communist uprisings took place in the early 1920's and in 1923 Hitler's abortive putsch was frustrated. Germany's inability to fulfill the heavy reparations demands stipulated by the treaty led to French occupation of the Ruhr (1923-24). National bankruptcy was avoided by the adoption of the Dawes plan (1924) and later, the Young plan. In 1925 Field Marshal von Hindenburg became president of the republic and in 1926 Germany entered the League of Nations and adhered to the Kellogg Pact.

Germany's postwar political situation was rendered difficult by the multiplicity of parties and the system of proportional representation which hindered the formation of a stable cabinet. The chancellorship of Brüning, leader of the Catholic Center party (1930-32), saw increasing economic and financial distress and a practical cessation of reparations payments. Hitler's rising National Social

erty won a plurality in both the July and November 1932 Reichstag elections but not until the failure of Franz von Papen and Kurt von Schleicher to form effective governments did President Hindenburg name Hitler Chancellor (Jan. 30, 1933). With the death of von Hindenburg in 1934, Hitler became complete master of Germany which was rapidly converted into a totalitarian state under the aegis of the Nazi Party. All other political parties were banned and the Jews were subjected to severe persecution. Through his foreign policy, Hitler repudiated the Treaty of Versailles and began full-scale rearmament. In 1935 he withdrew from the League of Nations and in 1936 signed the Anti-Comintern Pact with Japan, at the same time lengthening relations with Italy. The Rhineland was reoccupied in 1936 and Austria annexed in 1938. By the Munich agreement (Sept. 1938) he gained the Sudetenland and in violation of this agreement he completed the dismemberment of Czechoslovakia in March 1939. But his demands on Poland precipitated British and French declarations of war inaugurating World War II (Sept. 3, 1939).

German troops were victorious in Poland, Norway, Denmark, the Lowlands and finally in their attack on Russia. In late 1942, however, Hitler's "New Order" began to waver to retreat before the ever-increasing power of the Red Army and of Allied air attacks. German forces were ousted from North Africa, southern Italy, and part of Russia by the end of 1943 and with the Anglo-American advance through France the summer of 1944 Germany's military situation became desperate. The combined Anglo-Soviet offensive opened in January 1945 and by April 6 Germany had been split in half. Hitler, believed killed in Berlin on April 30, was replaced as Reichsführer by Admiral Doenitz. The military situation was hopeless, however, and on May 8 Germany surrendered unconditionally. On June 5 an Allied Control Council came into the de facto government of Germany which was divided into four zones occupied by U. S., British, French and Soviet troops respectively.

At the Berlin Conference (July 17-Aug. 2, 1945) President Truman, Generalissimo Stalin, and Prime Minister Attlee set forth the principles by which the Allied Control Council was to be guided. They were: Germany's complete disarmament and demilitarization; destruction of its war potential; rigid control of permitted industry; centralization of its political and economic structure. Nazism was to be uprooted and utterly destroyed and the German general staff broken up for all time. Agriculture and peaceful domestic industries were to be encouraged. Local self-government and free elections were directed toward, a degree of free speech, press, re-

ligion, and free trade unions were to be allowed consonant with the Allied intent to reconstruct German life on a democratic basis and prepare Germany for eventual acceptance among the free and peaceful peoples of the world. Pending final determination of territorial questions at the peace conference, the conference agreed in principle to the ultimate transfer of the city of Königsberg (now Kaliningrad) and its adjacent area to the Soviet Union and to the administration by Poland of former German territories lying generally east of the Oder-Neisse line.

ALLIED CONTROL COUNCIL. By virtue of its unconditional surrender May 8, 1945, Germany as a sovereign nation ceased to exist. The basic policy for the Allied control of Germany is set forth in the Berlin Declaration issued at Potsdam August 2, 1945, by Generalissimo Stalin, President Truman, and Prime Minister Attlee. The plenipotentiary authority charged with the implementation of this policy and the de facto government of Germany is the Allied Control Council for Germany—a quadripartite body made up of the Military Governors of the four occupation zones into which Germany is divided. Each of the members acts as chairman of the meetings in rotation for one month; all of its decisions must be unanimous. The Coordinating Committee—made up of the deputy Military Governors of the four zones—gives preliminary approval of common laws prior to submission to the Control Council. Under the Coordinating Committee are 11 quadripartite Directorates dealing with the following fields—Political, Legal, Economic, Finance, Military, Naval, Reparations, Deliveries and Restitutions, Transport, Manpower, Internal Affairs and Communications, and Prisoners of War and Displaced Persons. The Allied Secretariat, another quadripartite body, provides an office operating staff for administrative purposes.

ZONES OF OCCUPATION. For purposes of control, Germany is divided into four national occupation zones, each headed by a military governor, who is assisted by appropriate supervisory and operating staffs. In addition, the city of Berlin, the headquarters of the Allied Control Council, is divided into four national zones. The U. S. zone (43,136 square miles; population 17,800,000) comprises Bavaria and west central Germany. It has a well-balanced economy with both agriculture and industry. The British zone (36,869 square miles; population 18,900,000) is made up mostly of former Prussian territory; it stretches across north Germany from Luebeck and the Baltic Sea to the Dutch and Belgian frontiers. It is more highly industrialized than any of the other zones, containing the Ruhr industrial area. The relatively small French zone (21,558 square miles; population 6,900,000) includes two trian-

EUROPE
BOUNDARIES BEFORE
WORLD WAR II

0 100 200 300 400

Scale of Miles

EUROPE
BOUNDARIES BEFORE
WORLD WAR II

0 100 200 300 400

Scale of Miles

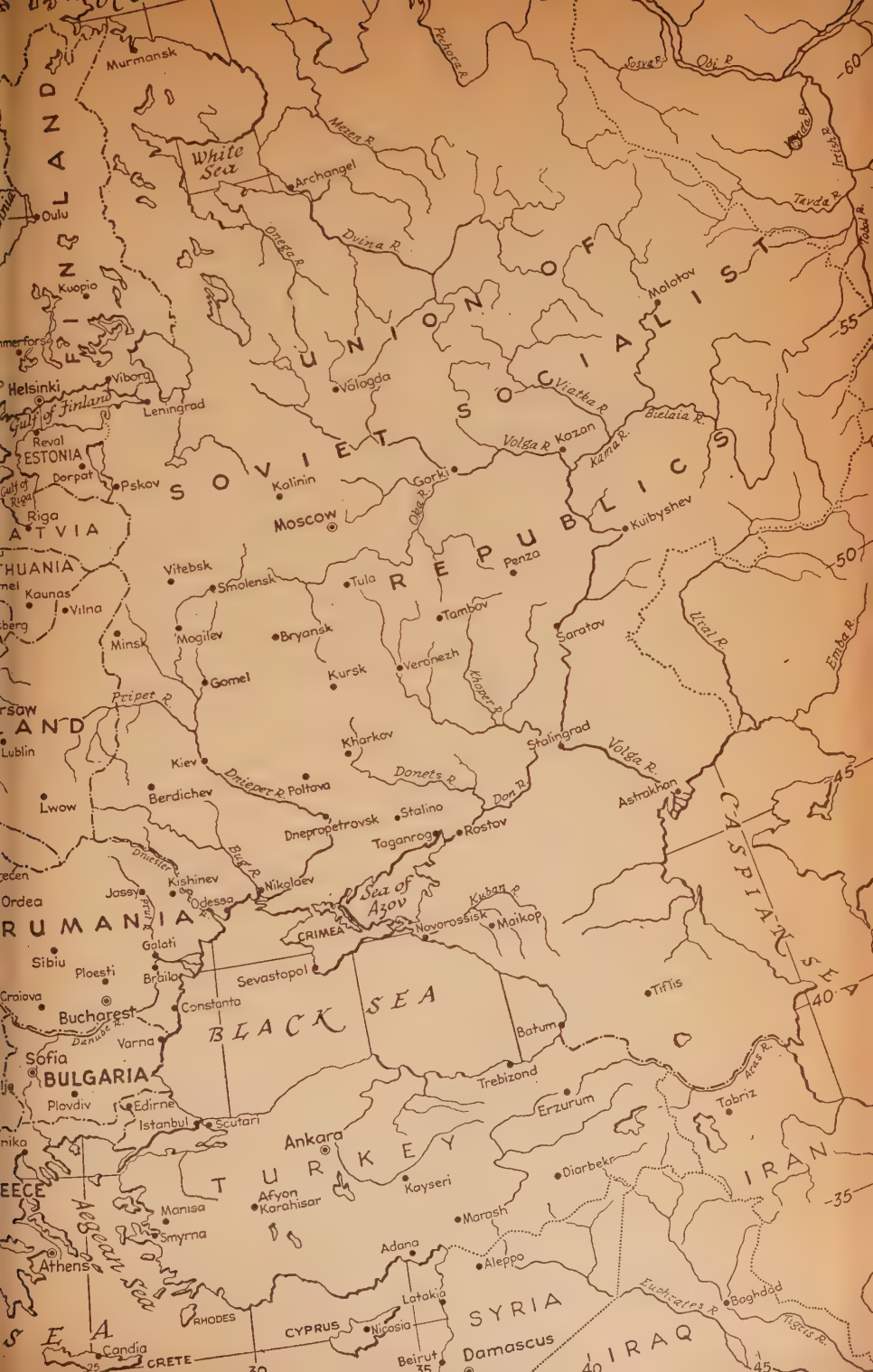
EUROPE
BOUNDARIES BEFORE
WORLD WAR II



0 100 200 300 400

Scale of Miles





gular districts separated from each other: Baden and western Württemberg in the southwest; and the Saar and Rhineland in the west. The Soviet zone (41,339 square miles; population 16,400,000) lies largely between the Oder and Elbe Rivers and includes most of Brandenburg, Mecklenburg, and the industrial Saxon and Thuringian territories.

DEFENSE. By the terms imposed on Germany, the German army, navy and air force have ceased to exist. All war equipment was delivered to the Allies or destroyed. Part of the fleet was divided among the U. S., Soviet Union and Britain early in 1946; the remainder was destroyed. Some munition plants were blown up and machinery remaining in war production plants was either destroyed or confiscated for removal from Germany as part of Germany's reparations payments. According to an official U. S. report issued May 30, 1946, Allied occupation troops in their respective zones included 315,000 American, 350,000 British, 111,000 French, and 700,000 Soviet.

EDUCATION. In pre-war Germany (1938) there were 51,118 public elementary schools with 7,596,437 pupils; 1,563 intermediate schools with 272,635 pupils; 2,282 secondary schools with 670,895 pupils; 10 technical high schools with 9,554 students; and 25 universities with 48,139 students. As a consequence of the war, practically all education had lapsed by the spring of 1945. The Allied military authorities at once took steps to rehabilitate the schools by screening teachers for political reliability, printing new textbooks and restoring or adapting buildings for school purposes. By the end of 1945 ten universities (Berlin, Jena, Göttingen, Heidelberg, Marburg, Hamburg, Kiel, Halle, Tübingen, Freiberg) had resumed at least partial instruction, but the buildings of several others were so damaged that new quarters had to be found.

AGRICULTURE. In pre-war Germany only about 28 percent of the employed population was engaged in agriculture and forestry, and the country was not self-sufficient in food. The land to the east of the Elbe was mostly divided into large estates (now being broken up), while in the west, in the south and in most parts of central Germany, the land is held mostly by peasant proprietors. About 20 percent of the total area was unfit for cultivation and of the remaining area only about half was under the plough. The great northern plain is fertile in some areas, but it consists elsewhere of thin, sandy soils fit only to grow potatoes and rye. Viticulture is possible in the river valleys of the west—the Rhine, the Moselle, the Main and the Saar; the wine yield (1938) was 53,795,390 gallons from 183,250 acres. The rich lands of central Germany, especially Saxony, produce sugar beets containing a high per-

centage of sugar. Fruit growing is possible all over the country, the southwestern and southern districts excelling in quality. Outside of a few grazing districts mixed farming is the rule. In 1937 Germany had 3,433,797 horses, 20,503,600 cattle, 4,692,300 sheep and 23,846,924 hogs. Milk production was 25,444,000 tons; butter, 416,000 tons; cheese, 143,000 tons. The table below shows crop production for two representative years for pre-1938 Germany.

MAJOR AGRICULTURAL CROPS 1933 AND 1937 (in short tons)

Crop	1933	1937
Rye	9,620,000	7,628,000
Wheat	6,177,000	5,534,000
Barley	3,823,000	4,012,000
Oats	7,663,000	6,526,000
Potatoes	48,579,000	59,083,000
Sugar beets	9,456,000	17,307,000
Fodder beets	33,858,000	44,685,000

The year 1945 was a poor harvest year because of the war, lack of agricultural manpower and bad weather conditions. Moreover, in losing the territory east of the Oder-Neisse line, Germany lost about 25 percent of its agricultural production.

INDUSTRY. Pre-war Germany was one of the world's greatest industrial nations with more than 41 per cent of her employed population engaged in industry. In the pre-war years the handicraft system was gradually replaced by large industrial establishments. Of the 1,917,793 industrial establishments listed in the 1933 census more than 90 percent were small establishments and only one percent employed over 50 persons, but over two-fifths of industrial workers were concentrated in this one percent of large industrial plants. Iron and steel production was concentrated in the Ruhr and Saarland. The industry suffered from a great lack of domestic iron ore, which was offset in 1933 by the importation of 20,600,000 tons. The electrical industry was concentrated in Berlin, the chemical industry in Bavaria, Rhinish Prussia and Prussian Saxony, and textiles in Saxony. In 1937 there were 2,600 breweries, and in 1938 8,889,900,000 cigarettes and 42,371,200,000 cigarettes were produced.

GERMAN INDUSTRIAL PRODUCTION 1933 AND 1937

Industry	1933	1937
Iron and Steel		
Pig iron	5,247,000 tons	15,960,000 tons
Raw steel	7,492,000 "	19,387,000 "
Chemicals		
Sulphuric acid	1,206,000 "	2,050,000 "
Benzine	293,000 "	1,260,000 "

Industry	1933	1937
Coal-tar distillations	208,000 tons	464,000 tons
Textiles		
Woolens	138,000 "	170,000 "
Cottons	350,000 "	369,000 "
Rayons	28,800 "	57,200 "
Artificial fibers	1,500 "	99,400 "
Motor vehicles		
Passenger cars	92,200	264,600
Trucks, buses	13,300	64,404
Food and luxuries		
Beetroot sugar	1,428,000 tons	2,210,000 tons
Beer (hecto-liters)	34,144,000	43,599,000
Miscellaneous		
Leather indus-try	126,400 tons	127,100 tons
Cement indus-try	3,820,000 "	12,605,000 "
Elec-tricity (mil-lion kwh)	25,654,000	48,969,000
Ships over 100 tons		
Number	57*	174
Ships Tonnage	73,723*	435,606

*1934.

REPARATIONS. By the Potsdam declaration and subsequent enactments, the Allies provided that Germany was to pay reparations, not in long-term payments reckoned in cash as after World War I, but in the delivery of gold, assets held abroad, and—most important—all machinery and equipment of plants making arms and munitions, ocean shipping, synthetic ammonia and gasoline, aeroplanes, aluminum, magnesium and various other equipment, all of which is to be removed from Germany by 1951. The three major purposes of reparations were to deprive Germany of all war production facilities, to assist the recovery of nations conquered and exploited by Germany, and to see that Germany could not enjoy a standard of living exceeding that of other European nations.

TRADE. Germany's pre-war trade is given in the following table.

IMPORTS, EXPORTS AND BALANCE OF TRADE 1932-1939

(in millions of dollars)

	Imports	Exports	Balance
1932	4,667	5,739	+
1933	4,204	4,871	+
1934	4,451	4,167	—
1935	4,159	4,270	+
1936	4,218	4,768	+
1937	5,468	5,911	+
1938*	6,052	5,620	—
1939†	2,755	2,814	+

*Excluding Austria and Sudetenland.

†Six months only.

In 1938 her principal customers were the Netherlands 8.7 percent, Britain 7.1 percent, Italy 6.6 percent, Sweden 5.2 percent, France 4.4 percent, her major suppliers, the U. S. 8.3 percent, Britain 5.7 percent, Italy, 5.2 percent, Sweden 4.9 percent and Argentina 4.4 percent. Her major exports were machinery 14.4 percent, ironware 9.2 percent, coal and coke 9.1 percent (39,753,000 tons), chemicals 7.3 percent, and electrical machinery 6.0 percent. Major imports were manufactured goods 7.3 percent, beverages and tobacco 6.4 percent, fruits 5.5 percent, iron ore, 5.2 percent (24,171,000 tons), and raw wool 4.9 percent (183,000 tons). The effect of reparations removals will be to reduce exports so greatly as to render difficult acquisition of foreign exchange for food and raw materials. It has been estimated, however, that by 1948 Germany may have enough exports to pay for imports to make her self-supporting at a standard not much below that of 1932. The first step toward the encouragement of inter-zonal trade was taken June 14, 1946, when an agreement was signed between the U. S. and Soviet zones for the quarterly exchange of products amounting to \$10,000,000.

COMMUNICATIONS. Germany railways and rolling stock, as well as the canal system, were largely destroyed during World War II, and the lack of adequate transportation seriously hindered German economic recovery. Less than 30 percent of her pre-war merchant marine (4,492,708 gross tons in 1939) was still afloat, and about 1,200,000 tons of this was distributed among the United Nations in the spring of 1946, leaving her with only a small merchant fleet for essential coastal shipping and fishing. Navigable waterways (7,930 miles in 1939) carried 153,219,700 tons of freight in 1938, of which the Rhine accounted for about half. The German river fleet (1938) comprised 17,757 vessels of 6,468,568 tons. Shipping on the Rhine is controlled by the Central Commission of the Rhine—an international body composed provisionally of U. S., British, French, Swiss, Dutch and Belgian repre-

sentatives—which was reconvened in October, 1945.

Railway mileage (1938) totaled 42,299, carrying 571,829,148 tons of freight. Highway mileage was 262,874 in 1939, including several large express highways (*Autobahnen*). Telephones (1939) numbered 4,226,504 and radio sets, 16,000,000.

FINANCE. The monetary unit is the German mark, nominally equivalent to 40.3325 U. S. cents, but severely reduced in value by inflationary printing of new currency. The exchange value of the mark has been pegged at 10 U. S. cents by U. S. occupation authorities. The Allies seized or compelled the delivery of all monetary gold and paper money in the banks. In January, 1945, the reich debt was 315,000,000,000 marks; the note circulation had risen to 47,000,000,000 marks, as compared with 3,000,000,000 marks in 1939.

NATURAL FEATURES AND RESOURCES. Germany lies in north central Europe, bounded on the west by the Netherlands, Belgium and France; on the south by Switzerland, Austria and Czechoslovakia; on the east by Poland; and on the north by the Baltic Sea, Denmark and the North Sea. The northern plain, the central hill country and the southern mountain district constitute the main physical divisions. The Bavarian plateau in the southwest averages 1600 feet above sea level but to the west, in the Black Forest, it reaches 9,738 feet in the Zugspitze, the highest point in Germany. Other mountain ranges are the Böhmerwald, the Erzgebirge and the Riesengebirge on the Czechoslovak border and the Harz Mountains in central Germany.

Germany contains several important navigable rivers. In the south the Danube, rising in the Black Forest, flows east across Bavaria into Austria. The other important rivers flow north. The Rhine, which rises in Switzerland and flows across the Netherlands in two channels to the North Sea, is navigable by smaller ocean-going vessels as far as Cologne. The Rhine and the Elbe, which empties into the North Sea, and the Oder, emptying into the Baltic, are all navigable within Germany for ships of at least 400 tons. The Weser, flowing into the North Sea, and the Main and Moselle, both tributaries of the Rhine, are also important.

The climate of Germany is intermediate between the oceanic climate of western Europe and the continental climate in the east. The generally equable climate of the north grades into pronounced extremes toward the eastern border where the winters are long and cold and the summers short and hot. The sheltered mountain valleys of the south enjoy a more temperate climate, especially the valley of the Rhine above Mainz. Rainfall is heaviest in

the south and west (over 30 inches) but all of Germany is well watered.

Aside from rich deposits of coal and potash, Germany's mineral wealth is no considerable. The Ruhr, Krefeld and Aachen districts of western Germany (mostly in the British zone) constitute one of the world's greatest coal mining regions with prewar reserves estimated at 65,520,000,000 tons. Production in this area (about 78 percent of total prewar production) is handicapped by the prevalence of thin seams, but distribution is favored by easily accessible natural waterways and efficient canals. Most of the Silesian reserves, estimated at 5,240,000,000 tons, are in the area under de facto Polish administration. Of Germany's total coal production in 1937, about 10 percent was used in private house consumption; another 10 percent was used by railroads and ships; 8 percent furnished energy in electric power plants; 28 percent was exported; and 34 percent was used for coking and distillation. In 1946 most of the coal produced was being used for the needs of the Allied occupation troops and for export to countries of western Europe. Valuable lignite deposits are located in the lower and middle Rhine districts and in Brunswick, Thuringia and Saxony. Potash reserves, estimated at 15,300,000,000 tons, are located in the Harz, Saale and Halberstadt districts and in Saxony. Many of the iron ore deposits consist of low grade ores, exploited at high cost by the Nazi regime. The table below gives production of major minerals for two representative years prior to any important territorial accretions.

MAJOR MINERALS 1933 AND 1937

(in short tons)

Mineral	1933	1937
Coal	120,737,785	203,374,300
Lignite	139,723,785	203,594,800
Iron ore	2,857,162	10,793,700
Lead	100,309	174,700
Zinc	178,573	214,100
Potash	8,116,014	15,039,200

Slightly over a quarter (27.5 percent) of prewar Germany was covered by forests which yielded timber (1,193,462.652 cubic feet in 1935) as well as material for paper, wood-fibre, cellulose and other products. Despite a highly advanced system of afforestation, Germany's prewar wood supply was insufficient for her needs. Areas especially rich in woodland include some between the Oder basin and the Elbe basin, near the upper Spree, the Harz and Thuringer Wald, the hills in the great bend of the Main above Frankfurt, the Fichtelgebirge, the Odenwalde and the Schwarzwald. Northwest Germany has almost no wooded areas.

The fisheries are an essential part of the German economy. In addition to the fish

eries in the Baltic and North Seas, the Germans carried on considerable ocean fishing prior to World War II. The catch (1937) amounted to 740,205 tons (excluding plaice, whales and whale oil) valued at \$41,256,-139. The most important fish were herring (203,430 tons), cod (139,092 tons), redfish (59,670 tons) and coalfish (67,624 tons). In 1938 Germany's whaling fleet caught 5,066 whales. The three floating whale factories remaining to Germany at the close of World War II were divided among the Soviet Union, Norway and Britain.

Greece (Kingdom)

(Hellas)

Area: 50,269 square miles.

Population (census 1940): 7,336,000.

Density per square mile: 145.9.

Sovereign: King George II.

Premier: Konstantinos Tsaldaris.

Principal cities (est. 1940): Athens (Athenai), 392,781 (capital); Piraeus (Peiraeus), 284,079 (port of Athens); Salonika (Thessalonike), 236,524 (seaport); Patrai (Patras), 61,278 (seaport); Kavalla, 49,980 (seaport; tobacco).

Monetary unit: Drachma.

Racial stock (1928): Greek, 92.8%; Turkish, 3.8%; Macedonian, 1.3%; Spanish, 1%; Others, 1.1%.

Languages: See Racial stock.

Religions (1928): Greek Orthodox, 96%; Mohammedan, 2%; Jewish, 1.1%; Others, .9%.

Rugged, mountainous Greece—ancient cradle of much that is dear to Western civilization—suffered cruelly in World War II and emerged as a land ripped by civil war between its right and left political elements. Greece, about the size of North Carolina, was invaded by the Italians in 1940. By April, 1941 the Greeks not only had driven the Italians out of Greece but were chasing them westward through Albania. The Germans came to Mussolini's rescue, invaded Greece from Bulgaria, and took Athens on April 27, 1941. Starvation and harsh persecution of the Greeks were common during the occupation. After liberation, Greece became a land of conflict with armed bands of Royalists and Communists terrorizing the nation.

Ancient Greece, with a recorded history going back to 776 B. C., reached the peak of its glory in the 5th century, B. C., and by the middle of the 2d century, B. C., had declined to the status of a Roman province. From 395 A. D. to 1204, it remained within the Eastern Roman Empire, until Constantinople fell to the Crusaders. In 1453, the Turks took Constantinople and by 1460 Greece was a Turkish province. The insurrection made famous by the poet Lord Byron broke out in 1821, and in 1827 Greece set up independently, with sovereignty guaranteed by Britain, France and Russia. Prince Otto of Bavaria was recog-

nized as king five years later, but he was ousted by revolt in 1862. Prince William of Denmark, as George I, succeeded him.

Up to this time Greece consisted only of the Peloponnesus and the lower part of the peninsula. Britain gave Greece the Ionian Islands in 1864, and Thessaly was added in 1881. Greek success in the Balkan Wars of 1912-13 brought the addition of Macedonia, Epirus, Crete and many Aegean Islands. In World War I, Greece kept a precarious neutrality until June, 1917 when King Constantine was forced to abdicate in favor of his second son, Alexander. Greece then entered the war on the allied side. After the war was over, Greek troops occupied Thrace and part of Asia Minor until Turkey routed them in 1922. Greece was proclaimed a republic on March 24, 1924, and there followed strife and dissension between Royalists and Republicans, although fair order was maintained during the premiership of Venizelos from 1928 to 1933. On Nov. 23, 1935, the people voted for the return of King George II who had abdicated in 1923 after a short rule. In April, 1936 General John Metaxas became premier and by August he had abolished parliament and set up a dictatorship.

Soon after, came the Italian and the German invasions of World War II. The government, which had fled the country, returned on Oct. 17, 1944 following Greece's liberation. In less than two months, all the EAM (National Liberation Front) ministers, decided leftists, resigned from the government, setting up a crisis which brought on months of fighting between British troops and the leftist resistance forces.

A peace was not concluded until Feb. 12, 1945. Three short-lived premierships followed until the elections in March 1946 gave a majority of Assembly seats to the Populist (Royalist) Party. Its leader, Konstantinos Tsaldaris, became premier on April 18, 1946. However, all the leftist groups boycotted the March elections and on into 1946, the peace of the country was wrecked by the depredations of armed bands of Communists and Royalists.

The sovereign King George II was born on July 20, 1890. He married Elizabeth, elder daughter of King Ferdinand of Rumania, on Feb. 27, 1921, and was divorced from her on July 7, 1935. The king has one brother and three sisters. The brother, Prince Paul, born Dec. 14, 1901, was married in 1938 to Princess Frederika Luise of Brunswick. They have three children: Princess Sophia, born in 1938; Prince Constantine, 1940; and Princess Irene, 1942.

On Dec. 30, 1944, King George set up a regency to represent him until the people decided by plebiscite whether they wanted a republic or monarchy. The Assembly elected in March 1946 was assigned to revise the 1911 constitution. Meanwhile, executive power vested in the regent was ex-

exercised through a cabinet of ministers headed by a premier.

On September 1, 1946, King George II scored an easy victory in a plebiscite on the return of the monarchy, winning 70 percent of the total vote. He returned from his exile in London on September 28.

Military service in 1940 was compulsory; the initial training period was 2 years. The army in 1940 had 320,000 active troops and 275,000 reserves. Military and naval aviation was controlled by the air ministry. Air force personnel in 1940 totaled 1,660, with 4500 reserves and 119 planes. The navy on Dec. 31, 1945, had one cruiser, 15 destroyers, 5 submarines, 4 corvettes and other vessels, all of which served with allied naval forces in World War II.

Education is compulsory for all children between the ages of 7 and 12. In 1938 Greece had 743 kindergartens with 38,338 pupils, 8,339 primary schools with 985,018 pupils and 407 high schools with 92,687 pupils. There were three universities (two at Athens and one at Salonika) with 7,230 students, an institute of technology, and a school of fine arts. In addition, the Ministry of Education is responsible through the Archeological Council for the conservation and repair of ancient monuments of all periods, and the upkeep and conduct of excavations.

The predominant religion is Greek Orthodox, the religion of the state, but all faiths are tolerated. The last available statistics (1934-35) indicated an average annual birth rate of 27.6—the third highest in Europe. From 1922 to 1924, some 1,350,000 Greek refugees were repatriated from Asia Minor. Many were settled in Greek Macedonia and Greek Thrace from which large numbers of Turks were removed to Anatolia.

AGRICULTURE. About three-quarters of the population is in agricultural pursuits but only one-fifth of the land is arable. The total area under cultivation in 1938 was 6,023,882 acres. The greater part of the cultivated area is devoted to cereals. Considerable areas are also taken up by olive trees and vines, and also the two valuable products, tobacco and currants, which are major export items. Cotton and rice are cultivated on a small scale. Olive oil production in 1938 from 380,000 acres was 102,805 metric tons. The principal fruits are oranges, lemons, figs, mandarins, apples, pears, and grapes. There were 8,138,772 sheep, 4,356,120 goats, and 976,322 cattle in 1938.

MAJOR AGRICULTURAL CROPS, 1938

Crop	Acres	Tons
Wheat	2,353,910	1,148,707
Barley	531,050	243,829
Corn	684,190	288,251
Tobacco	207,480	60,627
Vines (for wine)	396,255	424,937
Vines (for currants)	197,373	187,942

Development of large-scale Greek manufacturing is blocked by lack of native coal and by scarcity of capital. The most valuable products in 1939 were textiles, \$31,250,580; chemicals, \$25,461,819; and food items, \$20,537,407. Among other processes or manufactured products are olive oil, wine, spirits, flour, carpets, leather, cigarettes and building materials.

Exports in 1939 were valued at \$75,700,000 of which 27.5 percent went to Germany, 21.6 percent to the United States, 15.7 percent to Britain and 6.3 percent to Italy. Imports were valued at \$100,081,000 of which 29.9 percent came from Germany, 12 percent from Britain, 9.4 percent from Rumania and 1 percent from the United States. Principal exports were: horticultural products, especially tobacco and currants, 70.8 percent; oils and waxes, especially olive oil, 9 percent; mineral products, 4.8 percent; and wine, 3 percent. Chief imports were: agricultural products, especially cereals and sugar, metals and manufactures, yarns and textiles, animal and fish products, chemical and drug products.

The large prewar merchant marine comprising 589 steam and motor ships of 1,812,723 tons and 710 sailing vessels of 55,411 tons played a vital part in the national economy. World War II shipping losses amounted to 1,178,000 tons; the merchant marine on Mar. 31, 1946 totaled 1,700,000 deadweight tons. In 1938 6,943 steamers of 2,736,298 tons and 863 sailing vessels of 11,791 tons passed through the four-mile canal across the Isthmus of Corinth which separates the Peloponnesus from the rest of Greece. The chief ports are Piraeus and Salonika. The latter has two free zones one of which is Yugoslav.

Railway mileage in 1938 totaled 1,814 with a traffic of 2,115,314 tons. Highways totaled 5,148 miles.

Expenditures for the fiscal year 1939-40 were 14,653,841,014 drachmai; revenue 14,014,821,680 drachmai. The total public debt on March 31, 1940 amounted to 5,746,200,000 drachmai. Lend-lease receipts from the United States in World War II totaled \$76,838,000 to Greek forces outside Greece.

In natural features, central Greece, Epirus and western Macedonia all are largely mountainous. The main chain, the Pindus Mountains rise to 9,000 feet in places, separating Epirus from the plain of Thessaly. Greek Thrace is mostly a low land region separated from European Turkey by the lower Maritsa River. Among the many Greek islands are the Ionian group off the west coast, 752 square miles in area; the Cyclades group, 1,023 square miles; other islands in the eastern Aegean including Lesbos, Samos and Khios, 1,100 square miles; and Crete, the fourth largest Mediterranean island, 3,199 square miles.

Crete is mountainous, running 160 miles in length with width varying from thirty-five to seven miles.

The Greek climate is varied but generally similar to that of other Mediterranean countries. The maritime regions have temperate climate with short winters, and little snow or frost. In the uplands the winters are long and severe. Precipitation is heaviest in the mountains and overall, Greece experiences great extremes of heat and cold.

Greek minerals are varied but exploited only moderately. Principal ones are lignite, iron ore, iron pyrites, magnesite, chromite, lead, emery, marine salt, and the country's famous marble. Bauxite output in 1939 was 206,026 tons, and the molybdenum output in 1938 was 3,439,176 pounds. About a fifth of the country is forested, largely with pine, fir and oak. Resin and turpentine are the main forest products. The principal sea product is sponges.

Guatemala (Republic)

(República de Guatemala)

Area: 42,353 square miles.

Population (est. 1943): 3,450,372.

Density per square mile: 80.9.

President: Juan José Arévalo.

Principal cities (census 1940): Guatemala City, 163,826 (capital); Quetzaltenango, 33,538 (coffee, sugar); Puerto Barrios, 15,784 (chief Atlantic port); Zacapa, 14,443 (coffee, livestock).

Monetary unit: Quetzal.

Racial stock (1940): Indian, 55%; mixed and other, 45%.

Language: Spanish.

Religion: Roman Catholic.

Once the site of the ancient Mayan civilization, Guatemala was conquered by Spain in 1524 and for the next 300 years was the major center of Spanish government in Central America. Guatemala was one of the founders in 1821 of the Central American Union and, in 1839, set itself up as a republic. From 1898 to 1920 the dictator, Estrada Cabrera, ran the country, and from 1931 to 1944, General Jorge Ubico was the strong man. In July of 1944, the National Assembly elected General Federico Ponce president, but he was overthrown in October and in December Dr. Juan José Arévalo was elected.

The Constitution provides that a president shall be elected every six years by direct popular vote. A seven-member Council of State consists of four presidential appointees and three men elected by the National Assembly, the unicameral legislature whose seventy-nine members are popularly elected for four-year terms.

Each of the twenty-two regional departments is administered by a governor appointed by the president. The National Assembly elects Supreme Court and Regional Appeals Court judges. In 1944, Guatemala had an army of 20,000 and a small air force. Guatemalan lend-lease military receipts from the United States (1941-45) totaled \$21,089,000, an amount exceeded in Latin America only by Brazil.

Education, advanced under Ubico, is free and compulsory. In 1942, a total of 152,274 pupils attended 2,784 primary schools. In 1942, twenty-eight secondary schools had enrollment of 5,600. There is a university and four normal schools in Guatemala City.

Most of the ruling class is drawn from the 5 percent of the population that is white. More than 55 percent is Indian, and the rest is mixed white, Indian and Negro. Spanish is the official language, but at least eighteen Indian dialects are spoken. The Indians, the chief labor supply, are handled in feudal fashion by the coffee planters.

Agriculture engages 90 percent of Guatemalans. Coffee accounts for a fifth of the cultivated land, and two-thirds of the exports, followed by bananas, sugar cane, corn, beans, wheat, cotton and tobacco. Exports in 1944 came to \$23,856,753, while imports were \$20,702,604, chiefly cotton textiles, railway material, motor vehicles, flour, gasoline and oil.

Guatemalan manufacturing is small and local. The country has 600 miles of public railway connecting the coasts, 280 miles of private railway, 4,045 miles of highways, and in 1943, a total of 2,570 autos. Puerto Barrios, on the Atlantic side, is the main port of entry, the United Fruit Co. headquarters, and is linked by rail to the capital.

Guatemala is served by several airlines. In 1941 there were 3,800 telephones, 22,000 radios, and 3,765 miles of telegraph lines. The nation has six banks including the Central Bank of Guatemala, the only bank of issue.

Most of Guatemala is mountainous with many volcanic peaks, including Tajumulco, 13,821 feet high and the loftiest in Central America. The northern part is the great plain of Peten, largely uncultivated and geographically part of the Yucatan peninsula. The narrow Pacific slope, well watered and fertile, is the most densely populated and the most productive part of Guatemala. The climate is hot and humid on the coasts with heavy rainfall, and temperate in the highlands. The eastern coastline is 70 miles long; the Pacific 200 miles.

Guatemala has gold, silver, lead, tin, copper, mercury, coal, antimony, salt, chromite and sulfur, but it is uncertain whether they are in quantity to repay

exploitation. The country's forests, mostly in the Peten region, yield chicle for chewing gum, a small amount of rubber, and dyewoods and cabinet woods, such as cedar, mahogany and logwood.

Haiti (Republic)

(Republique d'Haiti)

Area: 10,748 square miles.

Population (estimate 1943): 3,500,000.

Density per square mile: 325.7.

President: Dumarsais Estimé.

Principal cities (est.): Port-au-Prince, 125,000 (capital, chief port); Gonaïves, 20,000 (farming district); Cap-Haïtien, 15,000 (seaport); Aux Cayes, 15,000 (seaport, coffee).

Monetary unit: Gourde.

Racial stock: Negro, 90%; Mulatto, 10%.

Language: French.

Religion: Roman Catholic.

Haiti, the only Negro republic in the Western hemisphere, occupies the western third of the island of Santo Domingo which was discovered by Columbus in 1492. Its political past is stormy and, today, it is the smallest and most thickly populated of the American republics, a nation beset by illiteracy, poverty and unemployment.

After successive Spanish and French domination, Haiti became a kingdom in 1800 under Toussaint L'Ouverture, a Negro leader. In 1822, two years after the kingdom fell, Haiti took over all of Santo Domingo and carried on until 1844 when the eastern two-thirds of the island revolted and established the Dominican Republic. Today the island is the only one in the world containing two sovereign nations.

Decades filled with revolution, corruption and disease came to a bloody climax in 1911-15 when Haiti had seven presidents in four years. After the assassination of the last one, United States Marines moved in. By a 1916 treaty the United States agreed to help administer the country until the Haitians proved capable of orderly self-government. The last Marines left in 1934, but a U. S. fiscal expert continued to supervise customs until 1941. On January 11, 1946, President Elie Lescot was driven from the country by revolution, and a three-man military junta took over until the election of Estimé in August.

Normally the president is elected for seven years by two-thirds vote of the National Assembly. That body consists of a 37-member Chamber of Deputies, elected for four years by popular vote; and a 21-member Senate, of which eleven members are elected by the Chamber of Deputies, and ten are appointed by the president. Haiti is divided into five administrative departments. All judges are named by the

president. The Garde d'Haiti, about 4,500 strong, serves as army and police force.

Most Haitians are descended from African slaves. Their illiteracy rate runs from 80 to 90 percent. Although 1941 figures showed 90,700 enrollment in primary and secondary schools, actual attendance is much less than that. The mulattoes—lightened by the blood of the early French settlers—dominate the political and social life of the nation. Many of them are Paris educated. They own the best lands while the mass of poor peasants struggle on small farm plots. While the ruling classes speak pure French, most of the people speak the patois of Creole French, and many of them still practice the strange folk religion of voodoo.

Haiti is predominantly agricultural. Coffee, which makes up more than 40 percent of Haitian exports, is the principal crop followed by sisal, sugar cane, cotton, bananas and cacao. Manufacturing is almost entirely for local consumption, but in 1938 there were four sisal factories and two sugar refineries.

Exports for the year ending September 30, 1945, totaled 85,561,000 gourdes, 78 percent to the United States, 14 percent to Britain. Imports totaled 65,770,000 gourdes, 84 percent from the United States, 4 percent from Britain. After coffee, exports included cacao, logwood, cotton, sisal, raw sugar, molasses, rice and bananas.

An energetic aid to Haitian economy has been the Société Haitiano-Américaine de Développement Agricole, a corporation founded in 1941 with American capital, to help promote Haitian industry. Known as SHADA, for its initials, the corporation was employing nearly 100,000 Haitians in 1944. Development of the rubber industry, using the fluid from the cryptostegia vine, is the principal goal and some production has already resulted.

In 1943 Haiti had 1,792 miles of improved road, 26,832 miles of unimproved road, and 143 miles of railway, of which fifty-five miles were owned by the Haitian American Sugar Company. Communications facilities include 1,500 miles of telegraph wire (1936), four radio stations (1938), 2,900 telephones (1942) and 3,000 radio sets (1941).

More than 75 percent of Haitian revenue is derived from customs paid in American currency on exports and imports. Revenue for the 1944-45 fiscal year was 41,890,000 gourdes; expenditure, 42,516,000 gourdes. The public debt was 52,936,000 gourdes.

Haiti, about the size of Maryland, is two-thirds mountainous, with the remainder marked by great valleys, extensive plateaus and small plains. The most densely populated and productive part is the Cul de Sac

Plain, near Port-au-Prince. Rivers are swift and generally not navigable. The climate is hot on the coast, temperate in the mountains, with hurricanes frequent in the May-to-October rainy season. Minerals, relatively unexploited, include gold, silver, copper, iron, antimony, tin, coal, nickel, and gypsum. In 1943 a sizeable bauxite deposit was found and signed over for U. S. development. Inland in Haiti are forests of mahogany, pine, *lignum vitae*, and other commercial woods.

Honduras (Republic)

(República de Honduras)

Area: 59,145 square miles.
 Population (census 1945): 1,201,310.
 Density per square mile: 20.3.
 President: Dr. Tiburcio Carias Andino.
 Principal cities (census 1945): Tegucigalpa, 55,715 (capital); San Pedro Sula, 22,116 (bananas, sugar); La Ceiba, 12,185 (seaport, bananas); Tela, 8,969 (seaport, bananas).
 Monetary unit: Lempira.
 Racial stock (1940): Mestizo, 86%; Indian, 10%; Negro, 2%; White, 2%.
 Language: Spanish.
 Religion: Roman Catholic.

Columbus discovered Honduras in 1502 and it was a Spanish colony, part of Guatemala, until 1821, the year of the general Central American revolt against Spain. Honduras declared its independence in 1838, and has been troubled by revolution and war ever since. American Marines intervened in 1903 and 1923. In 1931, 1932 and 1937, major revolutions were crushed by force. The Nicaraguan-Honduras boundary dispute of 1937 almost caused war and in 1945 the country was invaded from Guatemala by a group of Honduran exiles, who were suppressed.

Legislative power is held by the unicameral Congress of Deputies, whose members are elected for six years. The president also is elected for six years and is not supposed to succeed himself, but Congress twice extended the term of Dr. Carias who will be president until 1949. Honduras is divided into seventeen departments and one territory, the Bay Islands off the east coast, each with a governor appointed by the president. The five judges of the Supreme Court serve for six years. The Washington Convention limits the Honduran army to 2,500 men. In 1940 it was 2,325 strong with active reserves of 2,600. Service is compulsory. The government has established a school of military aviation to train an air force that now has twenty-three planes.

Education is free and supposedly compulsory, but less than half the children go to school. The government is trying to reduce illiteracy, estimated at 70 percent. In

1942 there were 1,083 primary schools with 55,557 pupils, eighteen intermediate schools with 2,544 pupils, and the National University had an enrollment of 378 students.

Most of the population is of mixed Spanish-Indian blood but the ruling class is of nearly pure Spanish descent. Except among isolated Indian tribes, Spanish is the common language. Most of the Negroes are British subjects imported for plantation work.

Honduran economy depends upon the banana, which makes up 50 percent of the nation's exports. The biggest banana plantations are along the northern coast. Other crops are corn, coffee, rice, henequen, tobacco and coconuts. Honduras also is an important source of sarsaparilla. Cattle raising and dairy farming flourish on rich pasture lands. Manufacturing is small and local. In 1943-44, Honduras exported \$9,462,532 worth of products, and received imports of \$12,227,944. The United States supplied 64 percent of the imports, and took 85 percent of the exports which, after bananas, included gold, silver, coffee, livestock and coconuts.

Honduras' railroads—900 miles of track in 1942—are all owned by fruit companies and used to transport bananas. Since the country is mountainous and rugged, aviation has become an important means of travel. Despite its small size, the country has thirty-eight landing fields. Highway mileage in 1942 was estimated at 780 miles. Lake Yojoa and several rivers are navigable for small steam vessels. In 1940 Honduras had 1,140 miles of telegraph lines and 1,916 telephones; and in 1941, three broadcasting stations and 16,000 radio sets.

In 1943-44, Honduras showed a budget surplus (\$181,461) for the first time in several years; the external debt, largely held in England, was reduced to \$1,761,937 and the internal debt to \$4,017,192. The Banco de Honduras is the chief bank and official bank of issue.

Honduras, in the central part of Central America, has a 400-mile Caribbean coast line and a 40-mile Pacific frontage. Generally mountainous, it has fertile plateaus and river valleys and narrow coastal plains. Of numerous rivers on the east slope, the Ulua drains a third of the nation and is navigable for most of its course. The climate is oppressive in the eastern lowlands, pleasant in the interior highlands.

In 1943 Honduras mined 9,467 oz. of gold and 1,146,784 oz. of silver. Copper and iron exist in paying quantity but are undeveloped. The country is noted for rich forest resources, particularly the tropical hardwoods. In 1944 nearly a million board feet of mahogany and 245,324 lbs. of crude rubber were exported.

Hungary (Republic)

Area: 35,911 square miles (1945).

Population (est. 1938): 9,106,252.

Density per square mile: 256.3.

President: Zoltan Tildy.

Prime Minister: Ferencz Nagy.

Principal cities (est. 1943): Budapest, 1,585,678 (capital, Danube port); (census 1939) Szeged, 141,254 (textiles, wheat); Debrecen, 128,442 (livestock); Kecskemét, 83,837 (horticulture); Pécs, 73,887 (farming).

Monetary unit: Florint, replacing Pengő.

Racial stock: Magyar, German, Slovak.

Languages: See Racial stock.

Religions (1930): Roman Catholic, 64.9%; Greek Catholic, 2.3%; Helvetican Evangelical, 20.9%; Augsburg Evangelical, 6.1%; Jewish, 5.1%; Others, .7%.

Fascist-minded militarists and greed for more territory lined up Hungary with Germany and Italy just before World War II. The fruits of this alliance and the resultant defeat of Hungary caused a smashed economy, wild inflation, stabilized poverty, Russian occupation and a reparations debt of \$300,000,000. In 1946 Hungary had a long way to go before an optimist could see any hope for even a middling prosperity.

Two thousand years ago Hungary was part of the Roman provinces of Pannonia and Dacia on the empire's borders. In 894 A. D. it was invaded by the Magyars who founded a kingdom. Christianity was accepted during the reign of Stephen I (St. Stephen) from 997 to 1083. The peak of Hungary's medieval power came in 1342-82 under King Louis the Great, of Anjou, whose dominions touched the Baltic, Black and Mediterranean Seas. When the Turks smashed a Hungarian army in 1526, western and northern Hungary accepted Hapsburg rule to escape Turkish occupation. Transylvania became independent under Hungarian princes. In 1686 Hungary was reunited under Leopold I, of Austria. After the 1848 revolt against Hapsburg rule led by Louis Kossuth was put down, the dual monarchy of Austria-Hungary was set up in 1867.

With Germany, the dual monarchy was beaten in World War I and from then on Hungary underwent hard times. There was a short-lived Socialist Republic in 1918. The chaotic Communist rule of 1919 under Bela Kun ended with the Rumanians occupying Budapest on Aug. 3, 1919. When the Rumanians left, Admiral Nicholas Horthy entered the capital with a national army. The Treaty of Trianon of June 4, 1920, cost Hungary 75 percent of its land and 60 percent of its population. Meanwhile, the National Assembly restored the legal continuity of the old monarchy and on March 1, 1920, Admiral Horthy was elected regent.

Former King Karl made two unsuccessful

efforts to return to the throne in 1921. From 1920 Hungary was, in effect, ruled by its great land owners, but the turn came in 1932 with the accession as premier of General Julius Gombos, a pro-Fascist. Under Gombos and his successors, Darányi in 1936 and Imreedy in 1938, cooperation with Italy and Germany was Hungary's guiding principle. Hungary joined the Anti-Comintern Pact of Feb. 24, 1939, and signed the Three Power Pact among Germany, Italy and Japan on Nov. 20, 1940. As inducement and reward for these actions, Hungary got part of Slovakia and all of Ruthenia from Czechoslovakia in 1938 and 1939, and northern Transylvania from Rumania in 1940.

Following the German attack on Russia, Hungary also declared war on June 27, 1941, but the war was not popular and Hungarian troops were almost entirely withdrawn from the eastern front by May, 1943. On March 19, 1944, the government of premier Nicholas von Kállay was overthrown, German troops occupied the country and a pro-German Quisling government was formed under M. Sztójay. As Russian troops advanced through Transylvania, Admiral Horthy appealed for an armistice, but he was overthrown on Oct. 16 and a puppet government was set up by the Germans with Ferenc Szálasi acting regent and prime minister. This regime soon fled to the Austrian frontier. On Dec. 23 there was formed in Soviet-occupied Hungary a provisional national assembly which set up a provisional government headed by Col. Gen. Bela Miklos, former commander of the Hungarian First Army. On Jan. 20, 1945, this government signed an armistice in Moscow under which all territory acquired both before and during the war was renounced. Hungary also agreed to pay reparation amounting to \$300,000,000 of which two-thirds was to go to the Soviet Union and one-third to Czechoslovakia and Yugoslavia. In the national elections held Nov. 4, 1945, the conservative Small Landholder party won a sweeping victory and Zoltan Tildy, its leader, became premier.

On Feb. 1, 1946, the National Assembly approved a constitutional law abolishing the monarchy and establishing a republic. Up to that time, Admiral Horthy had been regent to a non-existent king. The premier Zoltan Tildy, was immediately elected president and Ferencz Nagy replaced him as premier. The Assembly, which had been elected on Nov. 4, 1945, and assigned to draw up a new constitution, had this makeup in seats: Small Landholders, 246; Social Democrats, 71; Communists, 67; Peasants, 22. The Democratic, Citizens and Radical parties were unable to win any seats.

Pending the signing of the final peace treaty, Hungary is supervised by an Allied Control Commission composed of Soviet

British and U. S. military representatives. The Soviet chairman of the commission is the commander of the Soviet occupation troops in Hungary. U. S. and British participation is for the most part nominal and the country is actually controlled by Russia.

In 1938 Hungary repudiated the military restrictions of the Treaty of Trianon and reintroduced compulsory military service for all citizens between 18 and 60. The initial training period was two years with the army and three years with the air force. In May 1940 there were 200,000 active troops and 700,000 reserves. The air force in 1940 had an active strength of 6,000. The army, which is being reorganized and re-equipped along Soviet lines, was unofficially estimated at 30,000 in July 1946. Soviet occupation troops were estimated to number 260,000 at the same time.

Education is compulsory for children between 6 and 12 and for three more years they attend continuation schools or courses, many of them specialized agricultural schools. Besides these continuation schools and a relatively large number of special schools, Hungary in 1939 had 8,103 elementary schools, with 1,104,916 pupils. In the cities there were 418 primary schools with 105,466 pupils. High schools of different kinds numbered 263, with 79,435 students. There were three universities: Budapest, Pécs and Debrecen. Budapest had an enrollment of 3,917.

The average annual birth rate (1936-38) was 20.0 and the average annual death rate was 14.3. Under laws passed in 1927-28 optional social insurance was placed under the control of the national social insurance institute which offered medical, hospital, old age and disability insurance. Insurance for farmers was obligatory. The Land Reform Act issued in March 1945 provided for the confiscation of all estates over 1500 acres. The affected land, about 9,000,000 acres, was to be divided among about 500,000 families.

Agriculture is the basis for Hungarian life, engaging more than half of the population. Of the total area 63.6 percent can be cultivated and 17.9 percent is meadowland and rough pasture. Cereals grown in the fertile plains of the Danubian basin are the chief crops. The cultivation of vines, fruit and garden produce is important; the famous Tokay wine is produced on the southern slopes of the Hedyalja in the northeast. Wine production in 1938-39 came to 96,145,590 gallons.

Horse-breeding is a traditionally important branch of farming. Hungarians have a great love for horses, and their excellent breeds were exported in large numbers before World War II. Livestock in 1939 included 989,450 horses, 2,605,490 cattle (reduced by 57 percent in 1945), 1,750,221 sheep and 4,648,463 swine.

The dominant industries are all based on agriculture with flour milling in first place followed by sugar refining, brewing and canning. The second group of industries make hardware and machinery. Pig iron production in 1938 was 334,880 metric tons; steel, 647,508 metric tons. Most of the machine work is in Budapest and Győr. Cotton leads the textile industry, especially in Budapest, which is also a center of woolen manufacturers. Hemp and flax weaving are important. Other forms of industry include lime burning, brick making, glass working in the northern highlands, cement manufacture and the refining of oil at Budapest. In 1939 there were 4,322 manufacturing establishments with 414,815 workers and an output valued at \$694,064,716. Food products were most valuable at \$151,257,621, followed by textiles, \$110,842,238; metal, \$104,070,654; machinery, \$70,170,797; and chemicals and drugs, \$42,504,035.

In 1938 exports amounted to \$103,050,000, of which 45.7 percent went to Germany, 8.5 percent to Italy, 8.1 percent to Britain, 4.1 percent to Czechoslovakia and 4 percent to Rumania. Imports in 1938 totaled \$81,000,000, of which 41.6 percent came from Germany, 9.8 percent from Rumania, 6.6 percent from Czechoslovakia, 6.3 percent from Britain and 6.3 percent from Italy. Principal exports in 1938 were wheat 13.1 percent (481,000 tons), livestock 12.3 percent, poultry 5.1 percent, electrical machinery 4.9 percent and iron (semi-manufactured) 3.4 percent. The chief imports in 1938 were wood and wood products 10.7 percent, raw metals 5.6 percent, raw cotton 5.5 percent, paper 5.2 percent, and machinery and apparatus 5.1 percent.

The focal point in the country's transportation system is the Danube River. Navigable for 423 miles in Hungary, it carried 3,081,246 tons of freight in 1938. Hungary's central position makes it the center of an important transit trade; its prewar river fleet was the largest on the Danube. Railroad mileage in 1938 totaled 5,381, about 75 percent state-owned; the system carried 29,213,007 tons of freight. Highway mileage totaled 22,165, of which 16,785 was improved. Transportation facilities suffered heavy damage in the last part of the war. Telephones in 1943 totaled 244,934.

Expenditures in 1944 were estimated at 6,147,100,000 pengős and revenues at 5,866,700,000 pengős. The last prewar budget, in 1939, balanced at \$256,821,913. The national debt on Mar. 31, 1943 totaled 4,869,000,000 pengős. The central bank of issue is the National Bank of Hungary.

Most of Hungary is a fertile, rolling plain lying east of the Danube, and drained by the Danube and the Tisza Rivers. In the extreme northwest is the Little Hungarian Plain. In that area is Balaton, 250 square miles, the largest lake of western and

central Europe, and to the west of it lies the Bakony Forest, part of an upland extension of the Alps, called the Hungarian Mittelberge. Entering Hungary in the northwest, the Danube forms part of the boundary with Czechoslovakia before turning south through the central plain. The Tisza, rising in the Carpathians, flowing south through eastern Hungary parallel to the Danube, is normally navigable up to Szolnok in east central Hungary. It joins the Danube in Yugoslavia.

Hungary's mean annual temperature ranges from 48 degrees in the north to 52 degrees in the south. Precipitation varies from 30 to 35 inches in the Bakony Forest to less than 15 inches in the east. High summer temperatures and a long autumn favor agriculture.

While Hungary is mineral-poor overall, it has an estimated 250,000,000 tons of bauxite—about 25 percent of the world's reserve. Production in 1944 was estimated at 800,000 metric tons. The coal output is of low quality and insufficient to meet domestic needs. Output in 1938 was 1,148,597 tons. Lignite production in 1938 was 9,171,136 tons. Other minerals and their 1938 production figures include iron ore, 407,779 tons; manganese, 24,494 tons; and gold, 5,655 ounces. Estimated 1944 oil output was 9,900,000 barrels.

About 11 percent of Hungary is forested but the products are of little importance. Wood and wood products rank first among the nation's imports. Valuable fisheries are in Lake Balaton and the Danube and Tisza Rivers.

Iceland (Republic)

(Island)

Area: 39,709 square miles.

Population: 121,472.

Density per square mile: 3.1.

President: Sveinn Björnsson.

Prime Minister: Ólafur Thors.

Principal city (census 1940): Reykjavik, 38,219 (capital and only large town).

Monetary unit: Króna.

Racial stock: Almost entirely Icelandic.

Language: Icelandic.

Religion: Lutheran Christian.

Iceland, in the North Atlantic on the rim of the Arctic Circle, didn't fight in World War II, but still it won and lost in the conflict. It won its complete independence from Denmark but lost its placid isolation when the United States and Great Britain moved in to prevent German seizure, and to establish air and naval bases. With that, a new era dawned for Iceland. Because of its strategic position on a great circle air route, about halfway between New York and Moscow, the coun-

try today is inevitably coveted by big powers as an airfield site. U. S. and Russian jockeying for Icelandic favor is particularly apparent.

A bleak volcanic island about the size of Kentucky, Iceland was first settled in 874, mainly by Norse and Irish, with some English and Scotch. A constitution drawn in 930 created a form of democracy and provided an Althing, or General Assembly. Today the Icelandic Althing is the oldest legislative body in the world. In 1262-64 Iceland came under Danish rule. Through five centuries of intermittent plague, earthquake, famine and volcanic eruptions, the stout Icelanders endured, and in 1874 they obtained their own constitution. In 1918 Denmark recognized Iceland as a separate state with unlimited sovereignty but still nominally under the Danish king. On June 17, 1944, after a popular referendum, the Althing proclaimed Iceland a completely independent republic.

The British occupied Iceland in 1940 immediately after the German invasion of Denmark. In 1942 the United States took over the burden of protection. Iceland refused to abandon neutrality in World War II, which cost it charter membership in the United Nations, but it was a co-operative neutral to the allies throughout. Since the war ended, the country has been apathetic toward foreign bids for air bases and other rights.

Constitutionally, the president is elected for four years by popular vote, but President Björnsson was designated in 1944 by acclamation of the Althing. Executive power resides in a Prime Minister, presently assisted by a coalition cabinet of two Conservatives, two Social-Democrats and two Communists. The Althing is composed of two 26-member houses, each with equal constitutional power. The country is divided into sixteen districts, administered by district magistrates, and eight towns separately administered by town magistrates. The judicial system is comprised of lower courts presided over by the magistrates, from whom there is appeal to the 3-judge Supreme Court in Reykjavik. Juries are never used in the trial of criminal cases. Iceland has no army, no navy and no fortifications.

Illiteracy is unknown in Iceland. Education is compulsory from seven to fourteen and mobile schools are sent traveling through the sparsely settled areas. When the University of Iceland, established in 1911, needed new buildings in 1935, the government licensed it to conduct a national lottery to raise the funds. The high number of scholarships and the low tuition makes higher education virtually free to any qualified applicant.

Iceland publishes more books, newspapers and magazines per capita than any country in the world. Its language, Ice-

landic, has no dialects and has changed little through the centuries. In addition, Danish is widely understood and spoken. The Lutheran Christian Church is state-supported but there is complete religious freedom. A system of social insurance set up in 1935 provides for accident, sickness and old-age benefits.

About six-sevenths of Iceland area is unproductive, and only one-fourth of 1 percent is under cultivation. With about 35 percent of the population engaged in farming, sheep raising is the most important branch of this industry. Hay, potatoes and turnips are the principal crops.

About one-fifth of the people are engaged in fishing, and fish and fish products make up the bulk of Iceland's exports. The annual catch averages about 350,000 tons, and the total value of the industry was estimated in 1941 at 94,500,000 kronur. In normal years many British, German, French and Norwegian fishing craft visit Iceland's fisheries which lead the world in cod, and are important for herring, plaice and halibut. In 1938 Iceland produced 2,700,000 gallons of cod and shark-liver oil.

In 1944 Iceland's exports totaled 254,000,000, and the nation had a favorable trade balance of almost 13,000,000 kronur. Great Britain, Canada and the United States take most of the exports, although Germany and Scandinavia were important customers before World War II. Along with fish, some mutton, hides, skins and wool are exported.

Iceland has no railways. Before the war it had 2,758 miles of highways, of which 1,748 were improved, but military occupation brought new construction, much of it still unrevealed. In rural districts, most transportation is by horse-drawn cart. In 1943 the merchant marine totaled 443 vessels of 39,315 gross tons. In the same year the public debt was 65,746,000 kronur. Expenditures in 1945 were estimated at 100,211,675 kronur, against revenue of 108,177,878 kronur.

Iceland, with maximum dimensions of 298 by 194 miles, is mostly tableland, high, rugged, barren and composed of volcanic rock. It is one of the world's most volcanic regions. Mt. Hekla (5,108 ft.), near the southern coast, is the most notable of its 107 known volcanoes, many of which are still active and causing frequent earthquakes. Small fresh water lakes are found throughout the island and there are many natural oddities including hot springs, geysers, sulphur beds, canyons, waterfalls and swift rivers. More than 13 percent of the area is covered by snowfields and glaciers, and most of the people live in the 7 percent of the island comprised of fertile coastlands. One-third of the much-indented, 3,730-mile coast line belongs to a

peninsula to the northwest, joined to the mainland by an isthmus four miles wide.

The Gulf Stream modifies Iceland's climate to make it much like that of southern Canada, though with longer winters and shorter summers. Vegetation is of the Arctic type, mostly stunted. Except for peat and fisheries, Iceland has no natural resources.

Indo-Chinese Union

Area: 286,119 square miles.

Population (est. 1940): 23,700,000.

Density per square mile: 82.8.

Governor General: Admiral Thierry d'Argenlieu.

Principal cities (census 1936): Hanoi, 149,000 (capital); Cholon, 145,000 (commercial center); Saigon, 111,000 (chief port; rice); Pnom Penh, 103,000 (capital, Cambodia).

Monetary unit: Piaster.

Racial stock (1936): Native, 97.9%; Chinese, 1.4%; European, .2%.

Languages: Annamese, Cambodian, French.

Religions: Buddhism, Christianity (4%).

The Indo-Chinese Union, at the southeast corner of Asia, first met the West in the 16th century when Portuguese traders and missionaries arrived. In the 19th century France received preferential treatment for helping the emperor of Annam recover his throne. Over the last half of the 19th century, through a series of arrangements, France gradually extended influence over the whole area as it exists today.

After France fell in 1940, Vichy authorized Japanese troops to enter and the country became one of the springboards for the Japanese campaign against Singapore. When, in March of 1945, the Japanese seized control of the whole country, Annam, Cambodia and Luang Prabang declared their independence. After the Japanese surrender, British and Chinese troops occupied Indo-China in the face of a growing native nationalist movement, and restored conditions for the French authorities who took over on Jan. 1, 1946.

Until the beginning of World War II, Indo-China was an administrative federation of one colony—Cochin China; four protectorates—Annam, Tongking, Cambodia and Laos; and a special territory—Kwangchowan. These had various degrees of native rule but the real administrator of each unit was the French chief resident.

Early in 1945, France announced intention to organize the area into five states constituting a federal union, with the components enjoying limited self-government under a French governor general. Under this plan, Cambodia received internal autonomy on Jan. 4, 1946. The Republic of Viet Nam—made of Annam,

Tongking and Cochin China—was recognized as a free state on March 7, 1946.

In 1939 there were thirty-nine elementary and three high schools for French children with attendance of over 8,000. For natives there were 7,141 primary schools with 519,000 pupils, nineteen middle schools with 5,640 pupils, and four high schools with 550 pupils. Attendance at the five professional schools and the University of Hanoi was mostly native.

The Annamese, strongly influenced by contact with China, make up 80 percent of the union's population. Next in importance are the Cambodians, about 3,000,000 strong. There are several other racial groups, some very primitive. The Chinese, concentrated in the cities, are the merchant class and own 90 percent of the rice mills. Most of the population live on the plains near the sea.

Rice grows on five-sixths of the cultivated land, employs and feeds most of the population, and is the leading export and chief source of wealth. Production, centered in Cochin China, averages up to 4,500,000 tons. Exports in 1940 were 1,767,000 tons.

The other important export crops are corn and rubber. Other crops include sugar, copper, cotton, tobacco, tea, coffee, groundnuts, sweet potatoes and beans. The livestock industry is of importance in Laos, Annam and Cambodia. Livestock (1936) included 1,875,200 water buffaloes, 3,514,200 swine, 2,314,085 cattle, 79,240 horses, and mules and 300 elephants.

The Union is largely an exporter of raw materials. Its factories are small and process goods for local consumption or agricultural and forest products for export. Most important are the rice and saw mills. There are also cotton and silk textile factories, sugar refineries, match and paper factories.

Exports in 1939 totaled \$87,742,000. Imports were \$60,097,000. Chief exports were rice, rubber, corn, coal, hides and skins, and tin. Imports included mineral manufactures, corn, petroleum products, silk cloth, cotton, and wool.

The principal ports are Saigon, the largest, and Tourane and Haiphong. Indo-China has several thousand miles of waterways, including the Mekong which is navigable for two-thirds of its course. In 1939 there were 2,093 miles of railways, 75 percent state-owned. An excellent highway system includes 5,563 miles of improved road, and 11,477 miles of local road.

Extending about a thousand miles from north to south, Indo-China has two great delta regions—the Mekong in the south and the Song-koi in the north. These are separated by the Annam Mountains, and to the west of them are the mountainous continental regions of Laos. The climate is

monsoonal with nearly all of the very heavy rainfall received between May and October. Laos, in the interior, is cooler and drier than most of Indo-China.

Mining is most developed in the north. Output in 1940 in metric tons included: coal, 2,100,000; tin, 1,560; tungsten, 360; and zinc, 6,800. Iron ore, gold, phosphate, manganese, bauxite and lead are mined.

Forests cover 76,570,000 acres of Indo-China. The high mountain ranges of the north supply valuable tropical hardwood, bamboo, lacs and vegetable oil. Laos has rich teak forests, from which logs are floated down the Mekong to Saigon. Indo-China's fishing industry provides a major staple food to go with rice.

Iran (Kingdom)

Area: 634,413 square miles.

Population (est. 1940): 17,000,000.

Density per square mile: 26.7.

Ruler: Shah Mohammed Riza Pahlavi.

Premier: Ahmad Ghavam.

Principal cities (est. 1944): Teheran, 800,000 (capital); (census 1940) Tabriz, 213,542 (capital, Azerbaijan); Isfahan, 204,598 (cotton, tobacco); Meshed, 176,471 (Moslem shrine); Shiraz, 129,000 (wine, sugar beets).

Monetary unit: Rial.

Racial stock: Iranian, Kurdish, Azerbaijani.

Languages: See Racial stock.

Religions: Moslem (Shiah), about 90%; Moslem (Sunni), about 5%; Armenian, Jewish, Nestorian, Parsi.

Oil-rich Iran, one-fifth the size of the United States, was formerly called Persia, and has been a bone of contention among competing big powers for many centuries. It has a key location blocking the lower land gate to Asia, and also blocking long-held Russian aspirations for a warm-water port with access to the Indian Ocean. In modern times, Iran has drawn greedy big power interest for its rich oil deposits. A backward country by western standards, Iran achieved great publicity in 1946 when its complaint to the United Nations over the prolonged stay of Russian troops in northern Iran, became the first big controversial case for the Security Council.

Iran's history is a long one of rising and falling dynasties. After periods of Assyrian, Median and Achaemenidian rule, Persia became a great empire under Cyrus the Great, reaching from the Indus to the Nile at its zenith in 525 B. C. It fell to Alexander in 330 B. C., to the Selucidae in 312 B. C., and to the Parthians in 130 B. C. A native Persian regime arose about 226 A. D., was weakened fighting the Turks, and fell to the Arabs in 637. In the 12th century the Mongols took their turn ruling Persia, and in the early 18th century, the Turks and Russians occupied it. In

modern times, Russia, Turkey, Britain and France all took keen competitive interest in the country.

An Anglo-Russian convention of 1907 divided Iran into two spheres of influence, and these two powers occupied the country during World War I, in which it was a neutral. British attempts to impose a protectorate over all of Iran were rejected in 1919. On Feb. 26, 1921, General Riza Khan Pahlavi seized the government and was elected hereditary shah in 1925. Subsequently he did much to modernize the country and abolish all extraterritorial rights held by foreign powers.

Increased pro-Axis activity led to Anglo-Russian occupation of Iran in August, of 1941, after deposition of the shah in favor of his son, Mohammed Riza Pahlavi.

In November of 1945 a Russian-inspired autonomist movement won control of Azerbaijan, Iran's northwest province, and to protect this coup, the Russians kept their troops in that area past the treaty evacuation date of March 2, 1946. It was over this that the Iranians protested to the United Nations. Finally, the Russians pulled out their troops on May 6 but not before they had forced Iran to grant them oil concessions in the north.

Shah Mohammed Riza Pahlavi, the ruler, was born Oct. 16, 1919, and married, March 15, 1939, Princess Fawzieh, eldest sister of King Farouk of Egypt. Offspring: one daughter.

Iran is a constitutional monarchy and the shah has the usual powers of the head of a parliamentary state. Executive power is exercised by cabinet headed by the prime minister, appointed by the shah and responsible to the Majlis (parliament). The country is divided into 10 ustsans headed by governors-general appointed by the national government.

Military service is compulsory; the initial training period is 2 years. The army was modernized and reorganized by Riza Shah Pahlavi. In 1940 it consisted of about 400,000 men. The air force has several hundred planes, and the navy, several small craft in the Persian Gulf. Some of the ships were sunk during the invasion of Southern Iran by British troops in 1941. There is also an American-trained gendarmery of about 10,000.

Education has made good progress in the last twenty years, supplanting the old and essentially religious system. In 1938 there were 18,381 schools with attendance of 457,236. A university was opened at Teheran in 1934. The illiteracy rate is still high, though decreasing.

Most of the population is Moslem of the Shiah sect. The Kurds, in the central region, are of the Sunni sect.

Iran is predominantly agricultural. Large estates are numerous and irrigation

is common, especially on the central plateau. The principal crops are wheat (estimated production 1943: 1,267,645 tons) and barley (582,014 tons). Rice production, confined largely to the Caspian provinces, was estimated at 340,713 tons in 1943. Other important crops include fruit, especially grapes, dates and apricots; tobacco, cotton, sesame, sugar beets and corn. There are extensive grazing lands. Live stock estimates in 1938 included 13,711,160 sheep, 6,939,395 goats, 2,914,150 cattle, 1,458,490 mules and asses and 305,330 horses. Wool production in 1943 was estimated at 13,200 tons.

While Iran must still import many manufactured necessities, several new factories were established by the government after 1925. These included 7 sugar beet plants (1945 output: 28,600 tons), rice mills, oil mills, several textile factories (in addition to 28 private ones), a cement factory, copper smelter, glycerine factory and small arms factory. The Chalus silk mill has 370 looms producing about 1,000,000 yards a year. Both sugar and tobacco are government monopolies. The manufacturing of carpets for which Iran is famous is the most valuable industry (exports 1942: 2,657 tons).

Exports in 1943-44 totaled \$135,818,800, and imports, \$69,140,200. Principal exports (excluding petroleum which normally constitutes about 75 percent of the total) are cotton, wool, gum tragacanth, opium, rice, almonds and sheep casings. Leading imports are cotton piece goods, tea, sugar, silk tissues and drugs and chemicals.

In 1938 there were 17,000 miles of motorable roads and during World War II Allied engineer troops improved several hundred miles. Railway mileage totals about 1,072 miles. The principal line (870 miles) connects Bandar Shapur on the Persian Gulf with Bandar Shah on the Caspian. Over 5 million tons of supplies were sent to Russia by the trans-Iranian route during World War II. Navigable waterways include Lake Urmia and the Karun River. British Overseas Airways and Iranian State Airlines provide air service.

The ordinary budget (1944-45) balanced at \$137,900,000. The public debt (1944) was \$76,925,000. Incomes from various monopolies and oil royalties are important sources of revenue.

Iran is, in general, a plateau averaging 4,000 feet of elevation. In addition, there are maritime lowlands along the Persian Gulf and the Caspian Sea, and the Elzbug Mountains in the north rising to 18,500 feet at Mt. Demavend. From northwest to southeast, the country is crossed by a desert 800 miles long and from 100 to 200 miles wide. Iran's only navigable river is the Karun in the southwest. The central plateau is hot in summer, very cold in winter, but the Caspian area has a sub-

tropical climate. Rainfall is light everywhere except in the Elburz Mountains.

Considerable mineral wealth exists but oil is the only one exploited commercially. The principal field, near Shustar in the southwest, is worked by the Anglo-Iranian Oil Company whose concession began in 1901, runs to 1993. Royalties are paid to Iran on a tonnage basis. Production in 1944 was estimated at 102,000,000 barrels, about 4 percent of the world total. A Russo-Iranian Oil Company, formed in April of 1946, has rights to explore for oil in the Caspian area.

Other minerals known to exist in Iran are coal, cobalt, copper, iron ore, lead, manganese, marble, nickel, gold, silver, tin and mercury.

The main forest belt on the northern Elburz slope supplies railroad ties, charcoal and firewood. Gum tragacanth, a leading export, is the most valuable forest product. Valuable fisheries are worked both on the Persian Gulf and the Caspian. Exports in 1936 included caviar worth \$336,717, and dried fish worth \$474,332.

Iraq (Kingdom)

Area: 116,600 square miles.

Population (est. 1944): 4,500,000.

Density per square mile: 38.5.

Ruler: King Faisal II.

Regent: Crown Prince Abdul-Ilah.

Prime Minister: Seyyid Arshad el Umari.

Principal cities (est.): Baghdad, 400,000 (capital); Mosul, 260,000 (farming; oil); Basra, 180,000 (chief port); Karbala, 65,000 (Shiah shrine).

Monetary unit: Dinar.

Racial stock (est.): Arab, 75%; Kurdish, 15%; Iranian, 3.75%; Others, 6.25%.

Language: Arabic.

Religions: Moslem (Shiah), 53%; Moslem (Sunni), 35%, Christian, 2.8%; Jewish, 2.5%.

HISTORY. Iraq, a triangle of mountains, desert and fertile river valley, just west of Iran, just south of Turkey, is less than half the size of Texas. From earliest times it has been known as Mesopotamia—the land between the rivers—for it embraces a large part of the alluvial plains of the Tigris and Euphrates.

A settled civilization existed in Iraq in 4000 B. C. In 2100 B. C. it was the center of the ancient Babylonian and Assyrian empires. It was conquered by Cyrus the Great of Persia in 538 B. C., and by Alexander in 331 B. C. After an Arab conquest in 637 A. D., Baghdad was made the capital, the seat of the ruling caliphate. The country was cruelly pillaged by the Mongols in 1258 and during the 16th and 18th centuries was the object of repeated Turkish-Persian competition.

Nominal Turkish suzerainty imposed on Iraq in 1638 was replaced by direct Turkish rule in 1831. In World War I an Anglo-Indian force occupied most of the country and Britain was given a mandate over Iraq on April 25, 1920. The British recognized it as a kingdom in 1922 and abolished the mandate in 1930 when Iraq was admitted to the League of Nations. In World War II Iraq generally adhered to its 1930 treaty of alliance with Britain, but in 1941 British troops were employed to put down a pro-Axis revolt led by Rashid Ali. Iraq became a charter member of the Arab League in March of 1945.

GOVERNMENT. King Faisal II, born on May 2, 1935, succeeded his father, Ghazi I, who was killed in an accident on April 4, 1939. The king's uncle, Emir Abdul-Ilah, is regent.

Under the 1925 constitution, Iraq is an hereditary monarchy with a two-house parliament. The twenty-member senate is named by the king for eight years; the 115-member chamber of deputies is elected for four years. Executive power is vested in a council of ministers, headed by the prime minister whom the king appoints. A British adviser is stationed in each of the fourteen provinces.

Military service is compulsory, with an initial training period of 1½ to 2 years. Army and air force strength in 1938 was 28,000. Both were trained and re-equipped by the British in World War II. The British-trained police force numbers about 17,450. The 1930 treaty gives Britain the right to keep troops in Iraq under certain conditions.

SOCIAL AND ECONOMIC CONDITIONS. Primary education is free and nominally compulsory. Secondary education is neither free nor compulsory. In 1943-44 there were 788 state primary schools with 87,445 students, 61 private schools with 13,784 students, 45 intermediate schools with 8,933 students, and 22 secondary schools with 2,321 students. Iraq has no university.

The chief economic activity is agriculture, dependent upon irrigation and confined to the valleys of the Tigris and Euphrates. Iraq supplies about 80 percent of the world supply of dates (1943 exports: 72,327 tons). Chief among the cereal products are barley (1941: 1,047,000 tons), wheat (1941: 507,000 tons), rice, sorghum, maize, and millet. Many fruits and some tobacco and cotton are grown. Grazing is the principal occupation of the many nomadic and seminomadic tribes. Livestock estimates in 1943 included 475,000 cattle (including buffaloes), 6,000,000 sheep, 1,065,000 goats, and in 1939, 100,000 camels. Wool output averages 6,000 tons annually.

Industry is still embryonic. Of the 100 manufacturing firms the most important are those making brick and tile, woolen textiles, and cigarettes. There also are dis-

illeries, cotton ginneries, tanneries, soap, and glass factories. Tobacco factories produced about 180,000,000 cigarettes in 1941.

Exports in 1944, excluding oil, amounted to \$33,651,536. Imports were \$58,480,321. Principal exports are dates, barley, wool, hides and skins, and cotton; imports: cotton, silk, rayon, and wool piece goods, tea, sugar, clothing, and iron and steel.

The only port for seagoing vessels is Basra, located on the Shatt al-Arab near the head of the Persian Gulf. River vessels plying the Tigris between Basra and Baghdad have tonnage of over 60,000. There are 3,500 miles of unimproved road and 70 miles of surfaced roads. Iraq State Railways, the only rail line, operate three lines totaling 947 miles including part of the so-called Berlin-to-Baghdad line. Iraq is served by British Overseas Airways and Panian State Lines. There is an airport and seaplane base at Basra.

Ordinary revenue (1944-45) was estimated at 17,712,740 dinars and ordinary expenditures, 17,810,200 dinars. The capital works budget, based on oil royalties, usually balances the ordinary budget. There is no external debt.

NATURAL FEATURES AND RESOURCES. Iraq has arid desertland west of the Euphrates, a broad central valley between the Euphrates and Tigris, and mountains to the northeast that rise to over 12,000 feet. The fertile lower valley is formed by the delta of the two rivers which join about 120 miles from the head of the Persian Gulf. The coast line on the gulf is only twenty-six miles long.

Iraq's climate, generally, runs to great extremes—long hot summers and short cold winters. The area on the Persian Gulf is one of the hottest places in the world. Rainfall is light, ranging from about 15 inches in the north to almost none on the desert. Sand and dust storms are frequent.

Oil production centers at the Baba Gurgur fields near Kirkuk, operated on behalf of an international group by the British-managed Iraq Petroleum Company. The 1944 output was 3,897,567 long tons, shipped to Haifa in Palestine and Tripoli in Lebanon. The other field is operated by the Kanaquin Oil Company, a subsidiary of the Anglo-Iranian Oil Company, and produces only for local consumption—5,505 long tons in 1944.

Principal cities (census 1936): Rome, 1,094,710 (capital); Milan, 921,515 (leading financial, industrial center); Naples, 739,349 (seaport); Turin, 608,211 (Fiat auto works); Genoa, 512,313 (chief seaport); Palermo, 339,497 (Sicilian seaport).

Monetary unit: Lira.

Racial stock: Predominantly Italian.

Religions: Roman Catholic, 99.4%; Others (Protestant, Orthodox, Jewish), .4%.

As late as 1934, Italy under the late infamous Benito Mussolini wavered on joining forces with Hitler, but then the following year it took the plunge that ended on the road to ruin. Instead of being accepted as Germany's equal, Italy became a bullied satellite. Instead of tasting victory in World War II, Italian troops and warships were routed again and again. Instead of winning territorial spoils, Italy lost its empire and finally was invaded and bombed and devastated. In all this chaos Mussolini was killed, the monarchy was dissolved, and an Italian republic was born. It was a shaky republic and, like much of Europe in the war's wake, was torn between forces of right and left.

Italy, about the size of New Mexico but long and narrow in shape, did not exist as a unified country until 1870. Until 476 A. D., when the German General Odoacer became head of the Roman Empire in the west, the history of Italy is largely the history of Rome. From 800 A. D. on for several centuries, the Holy Roman Emperors, the Popes, Normans, Lombards, Saracens and Greeks all vied and contested for control over various segments of the Italian peninsula. Numerous city states, such as Venice and Genoa, and many small principalities flourished in the late Middle Ages in a time of conspiracy and plot as one after another strove for domination of Italian land.

After the War of the Spanish Succession in 1713, Milan, Naples and Sardinia were handed over to Austria but the increasing Hapsburg influence on the peninsula was interrupted for a short time after 1800 when Italy was unified by Napoleon who crowned himself King of Italy on May 26, 1805. After the Congress of Vienna in 1815, Austria was the dominant power in Italy.

MAZZINI. The movement for national unity began in the rebellions staged in the middle of the 19th century by the "Young Italy" group headed by Giuseppe Mazzini. In 1858 Count Cavour, prime minister of King Victor Emmanuel of Sardinia, secured the aid of Napoleon III of France. After French and Sardinian forces had defeated the Austrians in 1859, Lombardy was annexed to Sardinia, and by the time the first Italian parliament opened at Turin in February 1861, all Italy was represented except Venetia, held by Austria, and Rome which was the territory of the Pope. On February 18, 1861, Victor Emmanuel was proclaimed King of Italy. In 1866

Italy (Republic)

(Repubblica d'Italia)

Area: 119,733 square miles (July 1946).

Population (est. 1943): 45,681,000.

Density per square mile: 381.5.

President: Enrico de Nicola (provisional).

Premier: Alcide de Gasperi.

Italy sided with Prussia against Austria and received Venetia; Rome was seized in 1870. Umberto I succeeded to the throne upon the death of his father January 9, 1878. In 1882 Italy entered into the Triple Alliance with Austria and Germany. Victor Emmanuel III came to the throne on the assassination of his father on July 29, 1900. After war with Turkey in 1912, Italy seized Tripoli in North Africa and the Dodecanese Islands in the Aegean Sea. Italy denounced the Triple Alliance on May 3, 1915 and declared war on Austria on May 24. By the treaty of St. Germain, on Sept. 10, 1919, Italy received the south Tirol and the Istrian Peninsula.

MARCH ON ROME. In the years right after World War I, Italy was a virtual battleground between the Socialists and Mussolini's new Fascist movement. The weak government was powerless to maintain order as the two sides fought for power and influence. Finally, on Oct. 30, 1922, the Fascists staged their March on Rome and took over the government, with Mussolini named as premier by King Victor Emmanuel III. Mussolini and his Fascist Grand Council soon made Italy into a corporate state, with Mussolini as dictator.

In 1935-36 Italy successfully invaded, conquered and annexed Ethiopia, despite the complaints of the League of Nations and economic sanctions against Italy.

On November 6, 1937, Italy joined the German-Japanese Anti-Comintern pact and on December 11 resigned from the League of Nations. The Rome-Berlin Axis was converted into an alliance on May 22, 1938. Italian troops seized Albania in April 1939. On June 10, 1940 Mussolini announced a declaration of war against Britain and France. Italian troops were able to advance only a few miles into France before the Armistice was concluded on June 24 under which Italy annexed a small strip of France. On October 28, 1940 Italian forces invaded Greece from Albania, but they were driven back by the Greeks who held a third of Albania by the time the Germans made their attack on April 6, 1941. Italy subsequently occupied parts of Yugoslavia and Greece. Following the German capitulation in North Africa and the fall of Sicily, Mussolini resigned on July 25, 1943 and Marshal Pietro Badoglio formed a new government. On September 3, 1943, the date of the invasion of the Italian mainland by Allied forces, a military armistice was signed between General Eisenhower and Badoglio, and the legislative and administrative activities of the government were made subject to the approval of an Allied Commission.

On June 9, 1944 Badoglio was succeeded as premier by Ivanoe Bonomi who formed a coalition cabinet. This government was recognized as the de facto government of Italy on October 25 but only a co-belliger-

ent, and not as an ally. On Feb. 25, 1945 was given full legislative powers and the right to resume diplomatic relations.

When German resistance crumbled in northern Italy, the partisan Committee of National Liberation (CLNAI) quickly liquidated the puppet republic formed there by Mussolini who was captured and executed on April 27, 1945. On June 12 Bonomi resigned and was succeeded on June 21 by Ferruccio Parri, underground leader in northern Italy. On June 9 an agreement was signed by the United States, Britain and Yugoslavia which provided for an Allied military government in Venezia Giulia west of a line drawn from Trieste to the Adriatic frontier, and for Yugoslav administration east of that line. Premier Parri resigned on Nov. 24 and was succeeded by Alcide de Gasperi.

GOVERNMENT. Following the liberation of Rome on June 5, 1944, King Victor Emmanuel III designated his son, Umberto, Lieutenant General of the Realm, but he remained head of the House of Savoy. The King formally abdicated May 9, 1946, and Umberto took the throne as Umberto II. In a referendum held June 2, 1946, 94% of the Italian people approved the dissolution of the monarchy and the formation of a republic. King Umberto left Italy on June 13. On June 28 the assembly elected Enrico de Nicola provisional president of the Italian republic to hold office until a general election early in 1947. The constituent assembly elected on June 2, 1946, which drafted a republican constitution, includes 207 Christian Democrats, 115 Socialists, 104 Communists, 41 National Democratic Union, 39 Qualunque, 23 Republicans, 15 National Block of Freedom Action Party and thirteen others. A five-party coalition cabinet headed by Alcide de Gasperi, a Christian Democrat, was sworn in on July 13, 1946.

Italy is divided for administration into ninety-three provinces (including Sicily and Sardinia; excluding Libya), each headed by a prefect appointed by the national government and assisted by a locally elected council. Each municipality has a mayor, also appointed by the national government; he is assisted by an elected council in municipalities which are provincial capitals or have more than 10,000 inhabitants.

DEFENSE. Military service in 1940 was compulsory and universal; the initial training period normally was eighteen months beginning at twenty-one, with service or reserve continuing until thirty-five. The normal peacetime army strength was 260,000 men plus 50,000 carabinieri (military police). When partially mobilized in 1940 the army had 2,860,000 men and troops and 4,555,000 reserves. After the armistice the army was reconstituted in 1943 and by early 1945, 6 divisions were

action against the Germans. The army and navy air forces were separate. On Dec. 31, 1945 Italy still had 5 battleships, 9 cruisers, 36 destroyers and large torpedo boats, 5 submarines and many smaller vessels.

EDUCATION. Elementary education is free and compulsory from six to fourteen. Governmental and non-governmental elementary schools in 1941-42 numbered 139,771 with 5,110,328 pupils. Governmental and non-governmental secondary schools in 1941-42 numbered 5,136, with 556,260 students. In 1942-43 there were 29 royal universities and institutes, and 6 free universities and institutes with a total of 84,853 students. The University of Rome, founded 1403) had 14,210 students in 1939; Naples (founded 1224) had 12,289 students; Milan (founded 1924), 7,913.

RELIGION. Although the country is predominantly Roman Catholic which is the state religion, religious freedom is permitted. Appointment of archbishops and of bishops is made by the Pope, and Catholic religious teaching is given in all elementary and intermediate schools. Relations with the Church are regulated by the treaty with the Holy See of Feb. 11, 1929, which established the temporal power of the Pope over the Vatican City.

AGRICULTURE. Agriculture, the most important of Italian industries, engages over a third of the population. It is extremely diversified; difference of altitude, soil and climate allow the production of all European crops from rye to rice, from apples to oranges, and from hemp to cotton. Of the total national area, 76,000,000 acres, approximately 70,548,131 acres are productive. Of this area 25 percent is devoted to cereals, 30 percent to forage and pasture, 3.5 percent to vines, and 3 percent to olive trees. Italy ranks next to France in wine production (average 1931-38, 1,024,000,000 gal.) and next to Spain in olive oil production (average 1936-38: 35,000 quintals). The silk industry is centered in northern Italy and along the eastern coast. Estimated silk cocoon production in 1938 was 19,900,000 kilograms. The Italian climate and soil are well suited for fruit growing.

Livestock and dairy farming are important in Italy. In 1937, the country produced 1,000 metric tons of cheese and 49,000 tons of butter. Of the fifty-odd varieties of Italian cheese, the best known are the hard parmesan and pecorino (the latter made from ewe's milk) and the soft brie. In 1939 Italy counted 7,876,730 cattle, 1,867,760 goats, 781,160 horses, 3,290 swine and, in 1940, 9,968,000 sheep. Before World War II the fascist government carried on a wide land reclamation program and by July 1, 1938—2,692,119 acres of land had been reclaimed, mostly in Sicily, Apulia, and the Venetian provinces.

Italy suffered in 1945 from the severe drought as well as from disorders following the end of the war. The wheat crop was the smallest since 1920, rice the smallest since 1899, and sugar 10 percent of normal. Livestock and animal products were estimated at only 60 percent of pre-war level.

The last industrial census, in 1937, showed 728,150 industrial establishments employing 4,005,790 persons. There were 1,532,625 persons employed in the 1,152 companies employing more than 250 workers. While a large proportion of small and medium sized concerns were common in industry before World War II, there was a growing tendency, fostered by the nature of the corporate state, toward industrial concentration. The textile industry is the largest and most important, with 204,000 workers in 939 factories in 1939. The textile trade supplied most of the home markets and left a large margin for export. The decline of the silk industry after World War I was offset by the rapid growth of artificial silk industry. Production of rayon increased from 24,406 kilograms in 1927 to 126,514 kilograms in 1938. The importance of the metal industries is limited by lack of coal and sufficient iron ore reserves. The production of pig iron in (1938) was 854,536 tons and of crude steel, 2,322,856 tons. The chemical industries increased greatly in importance during the interval; in 1937 there were 5,164 establishments employing 99,470 persons. The clothing industry employed 656,737 people in the period 1937 to 1940; 541,000 were employed in the food industries including the important canning and preserving industries working largely for the export market.

TRADE. The most recent complete foreign trade statistics, for 1938, placed exports at \$530,038,000 and imports at \$592,900,000. The chief exports, by percentage were: cotton tissues 6.9, artificial fibers 3.5, almonds 3.3, fresh fruit 3.1, wool tissues 2.9, lemons 2.8, automobiles 2.5 and cotton thread 2. The chief imports also by percentage were: coal 15.2 (13,134,000 tons), raw cotton 7.3, mineral oils and products 5.8, wood products 3.5, wool 3.1, copper 2.9, scrap iron and steel 2, machines and utensils 1.9, wheat 1.9, hides and skins 1.7. The chief customers, by percentage, were: Germany 18.8, Eritrea 12.7, United States 7.5, United Kingdom 5.6, Libya 5, Switzerland 4.7, Argentina 3.9 and France 3.1. The principal suppliers, on a percentage basis, were: Germany 26.7, United States 11.9, United Kingdom 6.5, Switzerland 3.3, Poland and Danzig 2.8, Argentina 2.4, India 2.3 and France 2.3.

COMMUNICATIONS. On June 30, 1939, the merchant marine consisted of 2,301 sailing vessels of 99,228 tons; 1,057 steamships of 1,600,486 tons and 293 motor ships of 378,996 tons. There are more than 150 sea-

ports of which 66 have an annual traffic exceeding 250,000 tons. The principal ports, in order of traffic in 1938, were Genoa, Trieste, Venice, Savona, Naples, and Leghorn. Coastwise traffic is particularly important because of difficult land communications. Railway mileage in 1938 was 14,184 (10,358 government-owned) with a traffic of 63,507,912 tons. Highways totaled 38,720 mi., of which 7,771 were improved. Telephones in 1942 numbered 835,721.

FINANCE. The monetary unit is the lira; official rate 100 to the U. S. dollar. Estimated revenue for the fiscal year 1946 was \$1,160,000,000; estimated expenditures, \$1,826,000,000. The national debt had risen from 105,709,000 lire on 1935 to 405,823,000,000 lire in 1943 and was placed at 1,000,000 million lire or ten billion dollars in November 1945.

NATURAL FEATURES AND RESOURCES—TOPOGRAPHY. Six hundred of boot-shaped Italy's 707 miles of length are in the long peninsula that pokes into the Mediterranean from the fertile basin of the Po River. The Apennines, branching off from the Alps between Nice and Genoa, form the peninsula's backbone, and rise to peak height of 9,500 feet at Gran Sasso d'Italia. The Alps are Italy's northern boundary.

Several islands form part of Italy. Sicily, 9,860 square miles, lies off the toe of the boot, across the Strait of Messina, with a steep and rock-bound northern coast and gentler slopes to the sea in west and south. Mt. Etna, an active volcano, rises to 10,868 feet, and most of Sicily is over 500 feet in elevation. Sixty miles southwest of Sicily lies Pantelleria, 45 square miles, and south of that are Lampedusa and Linosa. Sardinia, 9,187 square miles, just south of Corsica and 125 miles west of the nearest Italian mainland, is largely mountainous, stony and unproductive.

Italy has many northern lakes, lying below the snow-covered peaks of the Alps. The largest are Garda, 143 square miles; Maggiore, 83; and Como, 55. The Po, the principal river, rises in the Alps on Italy's western border, flows across the Lombard plain into the Adriatic. Its basin is an estimated 26,798 square miles. The Arno and Tiber Rivers, rising in the Apennines, flow westward. Elsewhere are hundreds of short streams.

In climate Italy is variable. The Italian Riviera along the Gulf of Genoa is subtropical. The winters in the high Apennines are cold and bitter. The western slope of peninsular Italy is warmer than the eastern side, and the Po basin in the north has cold winters and very hot summers. Sicily basks in the warm and equable Mediterranean climate.

Italy is the world's largest producer of mercury, an important producer of sul-

phur, but for the staples of coal, oil, and iron, Italy is forced to import. Building stone, particularly marble, is plentiful. In the south Tirol and the central Apennines Italy has good water power which developed six million horsepower in 1936.

Less than 20 percent of Italy's area is forested. Principal products in 1938 were soft timber, 68,328,545 cubic feet; hard timber, 55,864,547 cubic feet; charcoal, 642,996 tons; and acorns and cork. The fishing industry—1938 catch, 52,861 tons—does not fill domestic needs. Coral and sponges are marketed commercially.

FORMER ITALIAN COLONIAL EMPIRE

Country	Area (sq. mi.)	Population (est. 1940)
AFRICA		
Libya	679,183	888,438
Eritrea	45,754†	835,037
Italian Somaliland	194,000†	1,021,520

ASIA

Dodecanese Is.	1,035	122,000
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*Est. 1943. †Census, 1931. ‡Excluding Ethiopian territory.

LIBYA. *Status:* Part of Metropolitan Italy except Libyan Sahara (whole area under British military government). *Capital:* Tripoli, 108,240 (1938). *Foreign trade:* (1938): exports \$5,731,900 (89.1 percent to Italy); imports \$46,400,600 (89.2 percent from Italy). *Agricultural products:* barley, olive oil, wheat, figs, date palms, tobacco. *Mineral:* Salt. *Sea products:* Sponge, tunic.

Italian Libya, lying along the north coast of Africa between Tunisia and Egypt, was a part of the Turkish dominions from the 16th century until 1911. Following the outbreak of hostilities between Italy and Turkey, Italian troops occupied Tripoli. Italian sovereignty was recognized the next year by the Treaty of Ouchy. In 1934 the area was organized into four provinces—Bengasi, Derna, Misurata and Tripoli—tania—which were incorporated in 1935 into Metropolitan Italy, and one military territory in the south, Libyan Sahara (465,362 sq. mi.). It was the scene of much desert fighting during World War II, since the fall of Tripoli on Jan. 23, 1942, has been under British military occupation and government.

The area has three natural divisions—the coast inland—the Mediterranean coast, the only region suitable for agriculture; the sub-desert; and the desert. About 10 percent of the population are Italian; the remainder natives, mostly Moslem. Senussi sect, which opposed Italian rule in Cyrenaica during World War I, exercised strong position among the remoter tribes in the hinterland. Railroads in 1938 totaled 242 mi. and improved highways, 2,160 mi.

ITALIAN SOMALILAND. *Status:* C

(under British occupation). *Capital*: Mogadiscio (pop. 1940: 45,000). *Foreign trade* (1937): exports, 40,675,000 lire; imports, 378,817,000 lire. *Agricultural products*: Dressed skins, cattle, sugar, cotton, cottonseed oil, fruits, bananas. *Forest products*: Gum, resin, kapok. *Mineral*: Tin.

Italian Somaliland, extending along Africa's east coast from the Gulf of Aden south to Kenya, fell within the Italian sphere of influence by treaties with the Somali sultans in 1889 and by agreements with Britain in 1924, the sultan of Zanzibar in 1905, and Ethiopia in 1907. After the conquest of Ethiopia the area, together with part of Ethiopia, became a government in Italian East Africa. It was occupied in Feb. 1941 by British Imperial troops, and, reduced to its pre-1936 area, has since been under British military administration.

The overwhelming majority of the population are Somalis who belong to the Sunni sect of Islam; they are a pastoral nomadic people whose livelihood depends on cattle, sheep and camels. However, the Italians established plantations in the south, especially in the fertile Juba region. Land under cultivation (1938) was 50,000 acres. The colony was far from self-supporting, requiring heavy Italian subsidy. The only railway has been torn up by the British; highways in 1938 totaled 1,942 mi.

ERITREA. *Status*: Colony (under British occupation). *Capital*: Asmara (pop. 1939: 6,000). *Foreign trade* (1934*): exports, 1,092,000 lire; imports, 215,816,997 lire; chief exports, coffee, salt. *Agricultural products*: Coffee, barley, tobacco, sesame, hides and skins. *Minerals*: Gold, salt, potassium salts. *Sea products*: Pearls.

The first Italian inroad in Eritrea came in 1870 when the port of Assab and adjacent territory were bought from a native Italian. By a decree of Jan. 1, 1890 Italian possessions along the Red Sea were united to the colony of Eritrea. In 1936 Eritrea, the parts of Ethiopia, became a government of Italian East Africa. British and Italian troops captured Asmara, Apr. 1, 1941 and Massawa, Apr. 8; the area, reduced to its pre-1936 borders, has since been under British military occupation.

The principal native elements are the Afropolitans and Tigrés who have close ethnic, linguistic, and religious ties with peoples across the border in Ethiopia. Italians in 1944 totaled 48,718. Irrigation is essential in the low-lying coastal plains and agriculture is practiced for the most part on the interior plateau (average elevation: 6,500 ft.) where the climate is suitable for European settlement. The pastoral industry engages most of the natives. The last separate budget, in 1935-36

later statistics were incorporated in those for Italian East Africa.

required a 25 percent subsidy from Italy. Railroads total 204 mi. and highways about 2,300 mi.

DODECANESE ISLANDS. *Status*: Colony (under joint Greek-British occupation). *Capital*: Rhodes (pop. 1936, 27,466). *Foreign trade* (1938): exports, \$1,149,000 (67.8 percent to Italy); imports, \$8,281,000 (77.6 percent from Italy). *Agricultural products*: Wine, olive oil, tobacco, hides and skins. *Sea product*: Sponges.

The Dodecanese, a group of 13 islands in the Aegean Sea near the coast of Asia Minor, were part of the Ottoman Empire prior to Italian occupation in 1912. Turkey recognized full Italian sovereignty by the Treaty of Lausanne in 1924 by which Castelrosso (4 sq. mi.) was also ceded. The German garrison surrendered to an Anglo-Greek force on May 8, 1945.

Fully 85 percent of the population is Greek. The islands are of slight economic value with the exception of the sponge-fishing industry. The most important islands are Rhodes (545 sq. mi.), Cos (111 sq. mi.), Kalymnos (49 sq. mi.), and Leros (28 sq. mi.). Rhodes and Cos are very fertile. There were 382 miles of road in 1937.

SASENO. This islet, of four square miles, situated at the entrance to the Bay of Valona (Albania) was seized by Italy in Oct. 1914. It was occupied in Nov. 1944 by Albanian forces and later fortified.

Japan (Empire)

(Nippon)

Area: 147,492 square miles.

Population (est. 1945): 77,997,642.

Density per square mile: 528.8.

Supreme Commander for the Allied Powers: General of the Army Douglas MacArthur (U. S. A.).

Ruler: Emperor Hirohito.

Premier: Shigeru Yoshida.

Principal cities (census 1940): Tokyo, 6,778,804 (capital, financial, manufacturing center); Osaka, 3,252,340 (chief industrial center); Nagoya, 1,328,084 (machinery, textiles); Kyoto, 1,089,726 (manufacturing); Yokohama, 968,091 (seaport, silk export center); Kobe (seaport, shipbuilding); Hiroshima (seaport, textiles); Fukuoka, 306,673 (seaport, textiles).

Monetary unit: Yen.

Racial stock: Japanese.

Language: Japanese.

Religions (1938): Buddhism, 60%; Shintoism, 21%; Protestant (215,166); Roman Catholic (118,856).

HISTORY. Japan, the world's largest producer of natural silk, had a major share in producing the world's biggest war. From the time when the Japanese militarists seized Manchuria from China in 1931, Japan was a determined aggressor bent on

dominating as much of Asia as could be brought under control. She began the undeclared war with China in 1937, and sought to knock the United States out of the Pacific with the attack on Pearl Harbor in 1941. For many months after Pearl Harbor, the Japanese Army and Navy enjoyed spectacular success, but by the end of 1942 the tide had begun to turn. Three years later the dropping of the world's first atomic bomb in combat on Hiroshima, followed by a second one on Nagasaki, knocked Japan swiftly into a surrender that already had been long inevitable. Overnight, Japan became what it had been in the beginning—a terribly overcrowded island group a little bigger than half of Texas.

Japan's early history is indistinguishable from mythology. One legend attributes the creation of Japan to the sun goddess, from whom the later emperors were allegedly descended. The first of them was Jimmu Tenno, supposed to have taken the throne on Feb. 11, 660 B. C.

Recorded Japanese history begins with the first contact with China in the 5th century A. D. Japan was then divided into strong feudal states, all nominally under the emperor, but with real power often held by a court minister or clan. In 1185 Yoritomo, the chief of the Minamoto clan, was designated shogun (generalissimo) with the actual administration of the islands under his control. Clans came and went but a dual government system—shogun and emperor—persisted till 1867.

First contact with the West came in about 1542 when a Portuguese ship off course arrived in Japanese waters. Portuguese traders, Jesuit missionaries, Spanish, Dutch and English traders were poking around in Japan by 1613. Suspicious of Christianity and Portuguese support of a local Japanese revolt, the shoguns expelled all foreigners in 1636 except the Dutch who were restricted to Nagasaki. Western attempts to renew trading relations failed until 1853 when Commodore Perry sailed an American fleet into Tokyo Bay with a letter from President Pierce.

A U. S. commercial treaty signed in 1859 was followed by similar pacts with Britain, France, the Netherlands and Russia, and the opening to foreign residents of the ports of Yokohama, Nagasaki and Hakodate.

Now Japan quickly made the transition from a medieval to a modern power. Feudalism was abolished. Industrialization was speeded. An imperial army was established with conscription. The shogun system was abolished in 1867 by Emperor Meiji and parliamentary government was established in 1889.

In 1904-05 the new Japan won prestige by defeating Russia in the Russo-Japanese

War, gaining the territory of southern Sakhalin, and Russia's port and rail rights in Manchuria. In World War I Japan grabbed Germany's Pacific islands and leased areas in China. The Treaty of Versailles then awarded her a mandate over the islands.

At the Washington Conference of 1921 Japan agreed to respect Chinese national integrity. In 1931, in the face of an inquiry by the League of Nations, Japan invaded Manchuria and set it up the next year as a puppet state, Manchukuo, under Emperor Henry Pu Yi. From then on Japanese policy was attuned to the saber rattling of her aggressive militarists and navy men. On Nov. 25, 1936, Japan joined the Axis by signing the anti-Comintern pact. The invasion of China came the next year, and the Pearl Harbor attack was unleashed on Dec. 7, 1941.

Despite her early successes, Japan never had a chance against American power. She was reeling close to defeat when she was forced on Aug. 14, 1945, to give up. The formal surrender took place Sept. 2 aboard the battleship *Missouri* in Tokyo Bay. Southern Sakhalin and the Kurils reverted to Russia, and Formosa and Manchuria to China. The Pacific islands remained under U. S. occupation.

In a statement issued at the end of the first year of occupation (Aug. 30, 1946) General Douglas MacArthur, the occupation chief, reported that Japan's armed forces had been completely liquidated, her war-making capacity destroyed, her business monopolies broken up and democratic forms of government instituted. He indicated that approximately 4,000,000 Japanese troops abroad and 2,500,000 troops at home had been disarmed and demobilized in addition to the repatriation of 2,000,000 Japanese civilians from abroad. Also cited was an agrarian reform program which was to enable 2,000,000 tenant farmers to purchase the lands they cultivated.

GOVERNMENT. ALLIED OCCUPATION. General of the Army MacArthur was appointed Supreme Commander for the Allied Powers (SCAP) on Aug. 14, 1945. The surrender terms provide for acceptance of Japan of the provisions of the Potsdam Declaration (July 26, 1945) and that "the authority of the Emperor and the Japanese Government to rule the state shall be subject to SCAP who shall take such steps as he deems proper to effectuate the surrender terms."

The Far Eastern Commission—composed of Australian, Canadian, Chinese, British, Indian, Dutch, New Zealand, Philippine, Soviet and U. S. delegates—is empowered to formulate the policies, principles and standards by which the fulfillment of Japanese obligations under the surrender terms may be accomplished, to review direct

issued to SCAP or any action taken by SCAP within the purview of the Commission's jurisdiction. The Allied Council for Japan—composed of SCAP who is the U. S. member, a Chinese and a Soviet member and a member representing jointly the United Kingdom, Australia, New Zealand and India—is to advise and consult with SCAP in carrying out the surrender terms and policies approved by the Commission.

RULER. Emperor Hirohito, born April 29, 1901, succeeded his father, Yoshihito, Dec. 25, 1926; married, Jan. 26, 1924, to Princess Nagako, born 1903. Offspring: 2 sons, Crown Prince Akihito, born Dec. 23, 1933 and Prince Masahito, born 1935 and 5 daughters. Succession is in the male line only.

NATIONAL GOVERNMENT. By the constitution of Feb. 11, 1889, supreme executive power resided solely in the Emperor, assisted by cabinet members chosen by him and responsible to him. The latter carried on the actual administration of the government. The diet consisted of two chambers, the house of peers of about 400 members, partly hereditary, partly appointment for life, and partly elective, and the house of representatives of 466 members, elected for 4-year terms by universal suffrage. The party standing in the April 10, 1946 elections was: Liberals (conservative) 143, Progressive (ultra-conservative) 94, Socialist (reformist) 92, Independent 84, Cooperative 16, Communist 5, and others 16.

LOCAL GOVERNMENT. Japan proper (1942) is divided into 3 urban and 43 rural prefectures, each with an assembly and council and a governor appointed by and responsible to the minister of home affairs. There were also 146 cities, 1,711 towns and 9,524 villages, each with an elected assembly and a mayor.

DEFENSE. The War, Navy, and Munitions industries and the Army and Navy General Staffs have been abolished, and the army and navy almost completely demobilized. Early in 1945 the army was said to have an effective strength of 90 divisions and 1,000,000 men. The navy (Sept. 1945) included one seaworthy battleship, 3 wrecked battleships, 4 disabled aircraft carriers, 4 cruisers (only one undamaged), 38 destroyers (many damaged), 51 submarines and 98 coastal craft. Complete losses included 8 battleships, 19 aircraft carriers, 10 cruisers, and large numbers of destroyers, submarines and smaller craft.

SOCIAL AND ECONOMIC CONDITIONS. **EDUCATION.** There were 48,637 schools of all types in 1938 with 15,638,780 pupils. There were 563 middle schools (high schools) had 1,486 students; and the 45 universities, 85 professors and 72,968 students. The best university and the one with the highest prestige is the Imperial University in Tokyo with about 8,000 students. Elementary literacy is more than 99 percent,

because a six-year elementary course is free and compulsory.

POPULATION. The population of Japan proper was approximately doubled during the period 1870-1935. The birth rate in 1938 was 26.7 and the death rate 17.44. The density of population is exceeded only by England and Wales, the Netherlands, Belgium and Java.

AGRICULTURE. Japan is a land of small rice and silk farms and, except in Hokkaido, the northernmost island, there is almost no large scale farming and animal husbandry. In 1938 there were 5,519,480 farm households cultivating about 15,000,000 acres. The average holding was less than three acres. Through double cropping wherever possible, Japanese self-sufficiency is possible, but on a very low level of subsistence. Rice, always the chief crop, came to about half of the 1939 cash crop.

Japan is the world's largest producer of natural silk, with about 30 percent of all farm households engaged in cocoon tending in 1939. Estimated output for 1945 was 120,000 bales, as compared with 536,225 bales in 1941. In 1938 Japan had 1,894,261 cattle, 1,140,479 swine, 114,000 sheep, 281,741 goats and 1,431,920 horses.

MAJOR AGRICULTURAL CROPS, 1939

Crop	Acres	Tons
Rice (rough)	7,889,180	13,475,618
Barley	1,892,024	1,540,464
Wheat	1,775,930	1,357,813
Potatoes	395,200	2,037,161
Oats	335,920	226,192
Tea	99,956*	60,296

*1938.

INDUSTRY. There were 112,332 factories, employing more than five persons each in 1938, with a total of 3,604,283 workers and an output of \$5,595,458,170. The most important were: metal (\$1,333,498,370), textile (\$1,133,772,350), machinery (\$1,087,397,220), chemical (\$984,689,110) and food (\$508,689,110). These statistics do not include the more than 3,000,000 persons estimated to be engaged in hand or cottage industries which play an important part in the economy. The cottage industry is prominent in spinning and weaving of silk and cotton, and in the manufacture of bicycle parts. After 1931 a considerable expansion took place in the heavy industries—metal, machine-building and chemical—which were adaptable to war purposes. State control was intensified at the same time. Directives issued by SCAP late in 1945 provided for the early dissolution of huge interlocking monopolies in business and finance, which involved approximately 1,200 firms. A directive issued Aug. 24, 1946 ordered the seizure for reparations of 505 of the largest industrial plants, mostly private-owned, which accounted

for 95 percent of the Japanese pig iron output, 88 percent of the steel ingots, 50 percent of machine tools and 87 percent of shipbuilding facilities. Shipbuilding capacity was to be reduced to 650,000 gross tons annually (from 1,900,000 tons), steel ingots to 3,500,000 metric tons, pig iron to 2,000,000 tons (3,000,000 tons in 1939) and sulphuric acid to 3,930,000 tons. Government-owned armament plants and naval yards were seized earlier in the year.

TRADE. Before World War II, Japan ranked fifth in world trade. Exports in 1939 totaled \$928,533,000. Imports totaled \$757,514,000 of which 34.4 percent came from the U. S. Major exports were raw silk, cotton cloth, machinery and parts, artificial silk tissues, and canned foodstuffs. Major imports were raw cotton, beans and peas, coal, oil cake, and rubber. Exports for Sept. 1945-May 1946 were \$51,477,000 and imports, \$27,846,000.

COMMUNICATIONS. On Dec. 31, 1939 Japan had 4,084 ships of more than 100 tons with an aggregate of 5,728,779 tons. As of Sept. 30, 1938 there were 17,791 sailing ships comprising 1,046,476 tons. Before World War II the merchant marine carried almost 80 percent of the foreign trade and was surpassed only by those of the U. S. and Britain. Its tonnage was estimated at from 1,000,000 to 1,500,000 in Sept. 1945.

Railway mileage in 1938 totaled 15,176 of which 10,940 was state-owned. The excellent highway system totaled 534,424 miles. There were 1,006,498 telephones and 228,416 miles of telegraph wire in 1939 and 35 broadcasting stations and 4,932,000 radio sets in 1940.

FINANCE. Revenues in 1940 were \$1,053,-213,840 and expenditures, \$788,387,040. The national debt in 1944 was 77,554,800,000 yen. The Bank of Japan, the central bank of note issue, had a paid-up capital of 45,-000,000 yen in 1941 of which the Imperial Household held 47 percent.

NATURAL FEATURES AND RESOURCES. Japan's four main islands and square mile area are Honshu, 87,028; Hokkaido, 30,148; Kyushu, 16,591; and Shikoku, 7,244. The Ryukyu chain to the southwest is U. S. occupied and the Kuriles to the northeast are Russian occupied. The surface of the main islands consists largely of mountains separated by narrow valleys. There are eighteen active volcanoes, including famous Fujiyama overlooking Tokyo from 12,395 feet of elevation. Earthquakes are frequent. The one in 1923 destroyed a third of Tokyo, all Yokohama, and killed almost 100,000 persons. Japan has many rivers, broken by shallows and rapids, and navigable in general only for flat-bottomed boats.

CLIMATE. Japan ranges from subtropical in its southern extremes, to a place of winter cold and snow in Hokkaido. The

winter temperatures are moderated in the central islands by the Japan Current. Rainfall averages 62 inches a year.

MINERALS. Japan is relatively poor in minerals. Recent output figures are 46,296,000 tons of coal and 9,810 tons of lead in 1936; 10,100,000 ounces of silver in 1938 and the following in 1939: 1,904 tons of tin, 85,979 tons of copper, 783,074 ounces of gold, and 2,654,000 barrels of oil, including Formosa production. Miners increased from 274,694 in 1935 to 435,810 in 1939.

FORESTS. Japan is well-wooded, with about 60,000,000 acres of forest. The 1938 value of all forest products was \$216,600,251. Included was bamboo, camphor, charcoal, and 850,578,006 cubic feet of timber. The wood pulp industry reached an output of nearly 900,000 tons in 1941.

FISHERIES. Fishing, one of Japan's biggest industries, provides a staple food and considerable exports in normal years. In 1938 the industry employed 1,442,713 persons, of whom 1,035,878 were fishermen. The fishing fleet totaled 356,482 vessels of which 288,327 were engineless, and part of it ranged from Alaska to the South Sea.

MAJOR SEA PRODUCTS, 1939

Product	Tons	U. S. dollars
Total		93,321,924
Sardines		
(coastwise)	1,034,233	11,008,318
Whales	9,519†	6,952,114
Cuttle Fish	116,568	5,140,670
Salmon	80,192	3,375,197
Pagrus "Tai"	12,401	3,011,711

*Excluding "fish culture" products valued at \$17,459. †Number.

Korea (Chosen)

Area: 85,225 square miles.

Population (est. 1940): 24,326,327.

Density per square mile: 285.4.

Military Governors: Col. Gen. I. Christoff (Soviet); Lt. Gen. John R. Hodge (U. S. A.).

Principal cities (census 1940): Keijo (Seoul) 935,464 (capital); U. S. zone headquarters: Heijo (Pyongyang), 285,965 (Soviet zone headquarters); Fusan (Husan), 249,734 (chief seaport); Seishin, 197,918 (seaport); RR center: Taikyū, 178,923 (silk center).

Monetary unit: Japanese yen.

Racial stock: Korean except (1939) 650,000 Japanese and 49,815 non-Japanese foreigners, mostly Chinese.

Languages: Korean, Japanese.

Religions: Buddhism, Confucianism, Taoism, Christianity (500,300 Christians in 1938).

Korea, situated on a peninsula about 150 miles long poking out from Asia between the Yellow Sea and the Sea of Japan, about the size of Minnesota. Over centuries it belonged sometimes to China

sometimes to Japan. It emerged from World War II under Russian and U. S. occupation but with the promise that it would receive independence "in due course."

In 108 B. C. Korea was annexed to China, and later divided into three small principalities. Koryu, the strongest of these, asserted independence in 918 A. D. In 1592 the Koreans defeated a Japanese fleet and, with Chinese help, ousted some Japanese invaders from their land. In 1627, the Manchus seized Korea and placed it again under Chinese sovereignty. In the Sino-Japanese War of 1894-95, Japan won principal influence in Korea, and in 1905 Japan reduced the country to a protectorate. In 1910 Japan formally annexed Korea and in 1919 the Japanese cruelly suppressed a Korean bid for independence.

A small Korean army was led by General Li Chungchun with headquarters in Chungking. In 1944 a provisional government was formed under President Kim Koo and Vice President Dr. Kuisc Kimm, with General Yaksan Kim as war minister.

The long subjugated Koreans received little experience in self-government under Japan and today are split into many factions ranging from Right to Left. U. S. and Russian differences over how to handle the present move toward independence have hampered the rehabilitation of the country. The U. S. zone of occupation has about 43 percent of the area, 17,000,000 population, and is controlled by 50,000 troops. The Russian zone, with about 9,000,000 population, is occupied by about 200,000 troops.

The Japanese made Japanese the language of instruction and stressed vocational rather than cultural education. In 1938 there were 3,372 elementary schools with 1,311,270 pupils, 110 high schools with 10,144 pupils, 226 technical schools with 4,060 pupils, ten normal schools with 5,565 students, and eighteen special colleges with 1,015 students. The one university, at Keijo, had 350 Japanese and 206 Korean students. There were 9,086 Korean students in Japan. The Korean language differs greatly from Japanese and Chinese and uses an alphabet. The Korean population is more or less homogeneous and successfully withstood Japanese efforts to assimilate it.

Korea, predominantly agricultural, cultivates about 12,000,000 acres. The 1938 production included 3,991,302 tons of rice, 226,376 tons of barley, and millet, rye, soybeans, tobacco, cotton, wheat and apples. Ginseng, a medicinal root, is intensely cultivated—611 tons in 1938. Raw silk production averages about 25,000 tons a year. In 1939 Korea had 1,705,000 cattle, 400,000 swine, 57,000 horses and 20,000 sheep.

Industrial development was speeded in the last years of Japanese rule. In 1938 there were 6,233 plants with 5 or more workers and total output valued at \$276,194,366. The leading industries by value of output were chemical, textile, food, beverages and tobacco. The northern part of the country now under Soviet occupation has the larger portion of Korea's industry, including large chemical fertilizer plants at Konan (Hungnam) on the east coast, an important oil refinery at Wonsan and a large hydroelectric plant on the Yalu River.

Korea's prewar foreign trade was closely linked with that of Japan. Exports in 1939 were valued at \$261,394,000, of which 71.4 percent went to Japan and 20.4 percent to Manchukuo. Imports were \$360,058,000, of which 87.1 percent came from Japan and 5.8 percent from Manchukuo. The major exports were rice, fertilizer, cotton cloth, soybeans and raw silk. Major imports included machinery and instruments, silk cloth, coal, timber and paper. Trade during the wartime years continued on about the same level.

Korea had 738 steamships with a tonnage of 106,712 and 1,125 sailing ships with a tonnage of 45,431 in 1939. Land communications, well developed by the Japanese for strategic reasons, included 2,619 miles of government and 1,107 of private railway in 1940 and 17,011 miles of highway.

Revenue in 1940 totaled \$157,986,998; expenditures, \$156,130,163; national debt in 1939, \$175,210,786. The only authorized legal tender in the U. S. zone are notes of the Bank of Chosen and type "A" supplemental Allied Military yen. The officially fixed rate for military purposes is fifteen yen to the dollar.

Korea's coast, with a rugged mountain range along the east, is fringed with more than a thousand islands. Several rivers are navigable for over a hundred miles, including the Nakdong in the north, the Han in the central region and the Yalu in the west. The climate is equable, about like that of the eastern United States. Annual rainfall is about forty inches.

Korea's best mining regions are in the north. Output for 1936 included gold, 616,935 ounces; coal, 2,515,449 tons; silver, 2,074,825 ounces; copper, 409 tons; and tungsten ore, iron ore, graphite lead, alum stone and pyrite ore. Steel production in 1936 was 95,300 tons; pig iron, 171,408 tons.

Despite Japanese exploitation, considerable Korean forest areas remain, especially in the north. The 1938 value of forest products was \$47,442,043, including 93,548,826 cubic feet of timber. Most of the fishing companies were Japanese-owned before 1945. Value of the 1938 catch was \$24,775,984.

Lebanon (Republic)

Area: 3,475 square miles.

Population (est. 1943): 1,025,000.

Density per square mile: 298.2.

President: Sheikh Bishara el Khoury.

Prime Minister: Riyad es Solh.

Principal cities (est. 1943): Beirut, 234,000 (capital, chief port); Tripoli, 70,800 (oil pipeline terminus).

Monetary unit: Syrian-Lebanese pound.

Racial stock: Arabian, Armenian, Circassian, Turk.

Languages: Arabic, French.

Religions: Maronite, Greek Orthodox, Greek Catholic, Mohammedan.

Ancient Lebanon is three times the size of Rhode Island and sits at the eastern end of the Mediterranean, between Palestine and Syria. In ancient times it was the mountainous hinterland of the Phoenician coast towns. From the 7th to the 11th centuries there infiltrated into southern Lebanon the heretics of Islam who finally coalesced into the Druse community.

In the 19th century the Turkish Sultanate encouraged the Druses to wage civil war against the Christian Maronites and after a massacre of 2,500 Christians in 1860, Lebanon was occupied by the French for a year. From 1864 to 1914, a Christian military government ruled the area under nominal Turkish sovereignty. After World War I, France received a mandate over Syria and Lebanon. The French drew a Lebanese border in 1920 to offset predominantly Moslem Syria and proclaimed the area a republic under French control on May 23, 1926.

Vichy controlled Lebanon after the fall of France in 1940 in World War II, but Allied forces moved in and established control by July 16, 1941. Despite Syrian objections, the French permitted Lebanon to declare its complete independence on Nov. 29, 1941.

The modern Lebanon republic is governed by a president elected by parliament, and a cabinet of ministers appointed by the president, but responsible to parliament. An independent army is being formed, based on a cadre of specialists formerly part of the French army in the Levant.

In 1942, there were 138,318 students attending various state, Moslem, Christian, private, French, American and British schools. Beirut has two universities. The Jesuit University of St. Joseph teaches in French; the American University uses English and Arabic. Christians are in the majority in Lebanon, as opposed to predominantly Moslem Syria.

Lebanon produces tobacco, olives, grapes and other fruits, wheat and silk. Manufacturing is confined mainly to local consumer goods. The silk industry is im-

portant in Beirut and Tripoli. Tobacco manufacturing is a government monopoly. The only available foreign trade statistics are combined with those of Syria. Beirut, the chief port, ships out silk, fruit and carpets; and imports machinery, tin plate and textiles.

A rail line links Beirut with Damascus and Syria. Another, built in World War I by Allied engineers, runs from Tripoli to the Palestine border, and is part of a line from Cairo to Istanbul, via Haifa in Palestine. Air service is available to Cyprus. One of the oil pipelines from the Kirkuk field in Iraq terminates in Tripoli.

The 1946 budget balanced at £SL60,040,000, with about 20 percent allocated for public works, and 20 percent for defense.

Lebanon has a hot dry summer, a cool rainy winter and no large streams. The topography is varied. There is a narrow coastal plain, and the steep Lebanese Mountains reaching a height of 9,900 feet at Mt. Sannin. Iron ore deposits are worked in the south, and building stone and marble are plentiful. The country also has thick deposits of inferior lignite coal.

Liberia (Republic)

Area: c. 43,000 square miles.

Population (est. 1938): 2,500,000.

Density per square mile: 58.1.

President: William V. S. Tubman.

Principal city (est.): Monrovia, 10,000 (capital and chief port).

Monetary unit: Liberian dollar.

Racial stock (est.): Negro (native), 99%; Negro (American), .8%; White, .1%.

Languages: English (official), native tongues.

Religion: Protestant Christian (official); Mohammedan, Catholic, Pagan.

In 1816, the American Colonization Society received a charter from Congress authorizing it to send emancipated Negro slaves to the west African coast. The first settlers, led by Jehudi Ashmun, landed in 1822 at Cape Mesurado near the present site of Monrovia. White governors, named by the society, administered Liberia until 1841. On July 26, 1847, independence was proclaimed, and the first president was Joseph J. Roberts, a Virginia octroon.

Between 1920 and 1932, during the presidency of C. D. B. King, considerable progress was made toward opening Liberia's interior, but even today only about 100,000 of its coast dwellers are regarded as civilized, and lack of transportation hampers development of the heavily forested inland. In 1942 a U. S.-Liberia agreement admitted U. S. troops to build and defend airports for the bomber command during World War II. In 1945 an agreement was announced providing

permanent U. S. military and naval bases in Liberia.

The government is modeled after that of the United States. The president and vice president are popularly elected for eight years. The twenty-one-member House of Representatives is elected for four years and the ten-member Senate for six years. Suffrage is extended only to landowners over twenty-one who are of Negro blood. The settled coast region divides into five counties for administration. Liberia's army, of about 4,000 men, is organized on a militia basis with every citizen liable for service from the age of sixteen to forty-five.

Education, compulsory in theory, is conducted in 190 schools, about half state and half mission. Attendance is about 5,000. There are six state high schools, a normal school, a state college and the Booker T. Washington Industrial and Agricultural Institute.

The English-speaking descendants of U. S. Negroes, known as Americo-Liberians, are the intellectual and ruling class. The aborigines, virtually all uncivilized, are divided into twenty-eight tribes speaking different dialects. Some are Moslems, some pagans. The Christians include Anglicans, Methodists, Baptists and Presbyterians.

Agriculture, on a crude level, is the principal means of livelihood for the tribal Liberians who raise coffee, rice, sugar cane and cassava. Manufacturing is nonexistent except for small native industry, and the country's only big enterprise is the million-acre concession granted in 1925 to the Firestone Plantations Company for rubber cultivation. Production was 5,320 tons in 1939, but has more than doubled since then.

Most of the trade is with the United States. Exports in 1944 were \$10,495,452, of which 90 percent was rubber and 9 percent raw gold. Imports were \$4,103,908, including machinery, vehicles, chemicals, foods, textiles and metal goods.

Liberia has no railroads. Coastwise communication is supplied by Pan-American Airways. Interior travel is by foot with native bearers. In 1939 there were less than 300 miles of roads, but U. S. troops built considerably more. The rubber plantations have the only telephones. There are no harbors but a port and naval base under construction at Monrovia, with U. S. assistance, at a cost of \$12,500,000.

Finances are under U. S. supervision. Revenue in 1943 was \$1,317,000 and expenditures, \$1,044,000. The national debt on Jan. 1, 1944, was \$1,193,000.

Liberia, about the size of Ohio, has a 350-mile frontage on the west coast of Africa, between Ivory Coast and Sierra Leone. Its only well developed area is a low coastal strip running inland about seven miles.

Beyond that is a low plateau, some of it mountainous, and traversed by many rivers, of which the Cavalla and the St. Paul are the most important. The climate is tropical throughout, with rainfall up to 150 inches a year on the coast.

Mineral resources are relatively unexploited. Gold is the most important one. Iron ore, mica and diamonds also are known to exist.

Much of Liberia is densely forested. Palm kernels and the plassava fiber are the principal forest products. Rubber trees grow wild.

Liechtenstein (Principality)

Area: 65 square miles.

Population (census 1941): 11,102.

Density per square mile: 171.5.

Ruler: Prince Franz Joseph II.

Chief of Government: Dr. Alexander Frick.

Principal city (census 1941): Vaduz, 2,020 (capital).

Monetary unit: Swiss franc.

Racial stock: German.

Language: German.

Religion: Roman Catholic.

Liechtenstein has the area of Boston, and lies on the right bank of the Rhine, just above Lake Constance, between Austria and Switzerland. It abolished its army in 1868 and has managed to stay neutral and undamaged in European wars. When Russian renegades and fleeing Germans broke into the country in 1945, the populace prepared to evacuate all towns and hide in the forest to avoid any provocative incidents. About the same time, Liechtenstein refused asylum to Pierre Laval, the French traitor.

Wheat, wine and fruit are the chief products. There are small manufactures of cotton, leather and pottery. The country's taxes are quite painless. For many years it had no debt, but at the beginning of 1945, the debt was 2,732,503 francs. In 1942-43, there were forty-two elementary schools and twenty continuation schools, with 1,701 pupils.

Liechtenstein was founded in 1719, made up of the Lordships of Vaduz and Schellenburg, immediate fiefs of the Holy Roman Empire. It seceded from the empire in 1806, joined the Rhine Federation until 1815, the German Confederation until 1866, and then became independent. Franz Joseph II, the reigning prince, was born in 1906, and succeeded his great uncle, Franz I, on July 25, 1938. In 1943, Franz Joseph married Countess Gina von Wilczek, of Austrian nobility.

The constitution has, since 1921, provided for a legislature, The Landtag, of fifteen members elected by direct, uni-

versal suffrage. Liechtenstein adopted Swiss currency in 1921, and has been part of the Swiss Customs Union since 1924. Its foreign trade statistics are included in those of Switzerland which administers the country's telegraph and postal service.

Liechtenstein's tiny area includes low valley land and upland peaks—Falkais at 8,401 feet, and Naafkopf, 8,432 feet. The chief mineral product is marble.

Luxembourg (Grand Duchy)

Area: 999 square miles.

Population (est. 1942): 301,000.

Density per square mile: 301.3.

Ruler: Grand Duchess Charlotte.

Premier: Pierre Dupong.

Principal city (census 1935): Luxembourg, 57,740 (capital, iron and steel).

Monetary unit: Luxembourg franc.

Racial stock: See Language.

Languages: Luxembourgian, French, German.

Religion: Mainly Roman Catholic.

Little Luxembourg, with about twice the area of Los Angeles, is a so-called buffer state between France, Germany and Belgium, and in World Wars I and II it was thoroughly buffeted about by Germany. Invaded and occupied both times despite the fact that it was supposed to have guaranteed neutrality, Luxembourg suffered worst in World War II when the Nazis deported several thousand natives as slave labor.

Luxembourg is a happy, little land in which a third of the nation raises crops and cattle, while all the nation derives prosperity from the iron and steel industry based on the rich iron ore deposits in the south of the country. Normally, Luxembourg has little unemployment, almost no illiteracy and such low taxes that many foreign holding companies maintain seeming headquarters there to escape high taxes in other countries.

Siegfried, Count of Ardennes, an offspring of Charlemagne, was Luxembourg's first sovereign ruler. In 1060 the country went under the rule of the House of Luxembourg, four of whose members became Holy Roman Emperors. From the 15th to the 18th centuries, Spain and Austria held it in turn. The Congress of Vienna in 1815 made it a Grand Duchy and gave it to William I, King of the Netherlands. In 1839 the Treaty of London ceded the western part of Luxembourg to Belgium. In 1890 the last magnate of the House of Nassau, Adolphus, succeeded to the throne. His son, William, took over rule in 1905, and William's daughter, Marie Adelaide, became ruler in 1912.

In 1919 the Grand Duchess abdicated and was succeeded by her sister, Princess

Charlotte, who was subsequently confirmed in power by a 1919 national referendum. After the Nazi invasion on May 10, 1940, the government fled the country, returning on September 23, 1944, after Allied troops had liberated it.

Luxembourg is a constitutional monarchy with the crown hereditary in the House of Nassau. The sovereign is the Grand Duchess Charlotte, born Jan. 23, 1896 and married on Nov. 6, 1919, Prince Felix of Bourbon-Parma. The heir to the throne is Prince Jean, born Jan. 5, 1921. The constitution of 1868 (with changes in 1919 limiting the power of the sovereign and instituting universal suffrage with proportional representation) provides for democratic government through a popularly elected chamber of deputies of 55 members. The chamber of deputies elected Oct. 21, 1945 for a term of 6 years includes 25 Christian Socialists, 11 Socialists, 9 Democratic Group, 5 Communists and 1 Independent. The constitution leaves to the sovereign the right to organize the government which consists of a minister of state who is president of the government (premier) and at least 3 other ministers. There is also an upper chamber of 15 members, the council of state, whose members are chosen for life by the sovereign and which enjoys the right of advice, amendment of bills, and a limited veto. The government has no military department.

Education is compulsory for all children between the ages of 6 and 13. The common or idiomatic language is *letzeburgesch*. German and French are also spoken. Labor unions are strongly organized into a large federation.

Although the soil is not very fertile, agriculture is prosperous. Distribution of land is: 305,712 acres of arable land, 20,268 acres of forest, 67,555 acres of meadow and 3,829 acres of vineyards. Principal crops are potatoes, oats, wheat, rye and grapes.

The mining and metallurgical industries based on iron ore found in the south are the most important industries. There were in 1938, a total of 35 blast furnaces with more than 20,000 workers which produced 1,709,700 tons of pig iron; the 7 steel foundries produced 1,584,100 tons of steel. Metal manufactures were valued at \$50,000,000. Other important industries include brewing, sparkling wine, leather, textiles and cement.

By a customs union between Belgium and Luxembourg which came into force May 1, 1922, to last for 50 years, customs frontiers between the two countries were abolished and Luxembourg customs joined to those of Belgium. Total customs, plus the product of certain internal excise duties, are divided after a small deducti-

used to encourage Luxembourg cereal growing in a proportion of 28 to 1. Luxembourg's trade figures are included in those of Belgium and no separate statistics are available; however, the major proportion of the exports consists of iron and steel products.

Transportation facilities in 1938 consisted of 318 miles of railway and 2,644 miles of highway, 1,301 miles of which are improved. The monetary unit is the Luxembourg franc whose value was fixed in 1935 at 1.25 Belgian francs. The consolidated debt in 1939 was 625,000,000 francs (\$25,000,000). Estimated revenue in 1939 amounted to 355,230,000 francs (\$14,209,000); estimated expenditures, 353,440,000 francs (\$14,137,600).

Luxembourg lies southeast of Belgium, borders France on the south, and Germany on the east. It is separated from Germany by the River Moselle and its tributary, the Sauer. It is a part of the plateau of Lorraine. The prosperity of the country depends upon its large iron ore mines which yielded 5,666,519 tons of iron ore in 1939. Pyrites (21,937 tons in 1939) is also produced.

Mexico (Republic)

(República Mejicana)

Area: 758,061 square miles.

Population (census 1940): 19,653,552.

Density per square mile: 29.9.

President: Miguel Alemán.

Principal cities: Mexico City, 1,448,422 (capital); Guadalajara, 229,235 (trade and manufacturing center); Monterrey, 185,833 (metallic industries); Puebla, 138,491 (industrial center).

Monetary unit: Peso.

Racial stock: Mestizo, 55%; Indian, 29%; White, 15%; Others, 1%.

Language: Spanish, 86%; Indian, 14%.

Religion: Predominantly Roman Catholic.

Mexico, the world leader in producing silver and sisal hemp and chicle for chewing gum, is four times the size of Spain, the source of its cultural heritage. It is one-fourth the size of the United States, the source of its modern industrial trend. Warm, mountainous Mexico has suffered a stormy political past, with bullets often speaking louder than ballots. Today the nation steers moderately leftward in deference to the needs of its millions of poor and too-illiterate peasants. It is a country of startling contrasts—ox-carts and airplanes, tractors and forked-stick plows, deserts and snow-capped mountains, jungles and fertile valleys.

Mexico's early history is shrouded in mystery but at least two highly civilized races—the Mayas and later the Toltecs—preceded the wealthy Aztec empire conquered in 1521 by the Spanish under

Hernan Cortes. Spain ruled for the next 300 years until 1810 (the date was Sept. 16 and is now celebrated as Independence Day) when the Mexicans first revolted. They continued the struggle and finally won independence in 1821 by the Treaty of Cordoba.

Turbulent years followed. From 1821 to the rise of Diaz in 1876, there were two emperors, several dictators and enough presidents and provisional executives to make a new government on the average of every nine months. Mexico lost Texas (1836) and after defeat in the war with the United States (1846-48) it lost the area of California, Nevada, Utah, Arizona, New Mexico and part of Colorado.

In 1855 the Indian patriot Benito Juarez began a series of liberal reforms including the disestablishment of the Catholic Church which had acquired vast property. A subsequent civil war was interrupted by the French invasion of Mexico (1861), the crowning of Maximilian of Austria as emperor (1864), and then his overthrow and execution by forces under Juarez who again became President in 1867.

During the rule of the dictator Porfirio Diaz (1876-80 and 1884-1911) the country was freed from political strife, made substantial economic progress, and gained a respected position in foreign relations. But Diaz' reactionary land policy led to revolution and his resignation in 1911. The next few years were marked by bloody political-military strife, and trouble with the United States culminating in the punitive expedition into northern Mexico (1916-17) in unsuccessful pursuit of the bandit-politician Pancho Villa. President Venustiano Carranza, who had shown pro-German sympathy in World War I, was assassinated (1920) and replaced by General Alvaro Obregon.

Plutarco Elias Calles (1924-28) largely abandoned Obregon's reforms and Obregon, re-elected (1928) on a radical agrarian and anti-clerical platform, was assassinated by a religious fanatic. There followed a series of Calles puppets who ruthlessly suppressed labor and farm organizations. General Lazaro Cardenas (1934-40), backed by the National Revolutionary Party (PRM), began a socialistic program of land distribution to peasants, government seizure of foreign-owned oil lands, and broad labor reforms. General Manuel Avila Camacho, President during World War II, played closely with the United Nations and followed Cardenas' policy at home. Meanwhile, when Franco took over Spain, Mexico became virtually the sponsor of the Spanish republican government-in-exile.

In July of 1946, Miguel Alemán was elected President, backed by the Camacho administration and the PRM. It was the most peaceful election in Mexican history.

GOVERNMENT. The President, popularly elected for six years and ineligible to succeed himself, governs with a cabinet of his appointed ministers. The Federal Congress has two houses—the 170-member Chamber of Deputies, elected for three years on a population basis; and the 58-member Senate, elected for six years with two Senators from each of the twenty-eight states and two from the Federal District (Mexico City). All married male citizens at least eighteen years old, and all single male citizens at least twenty-one are eligible to vote.

Federal District and Circuit Court judges are elected by the Federal Congress for six years, while the Federal Supreme Court judges are elected for life. Each of the states has considerable autonomy with a popularly-elected governor, one-house legislature and local judiciary. The President appoints the governors of the three Federal territories, and the governing body of the Federal District.

AREA AND POPULATION OF POLITICAL SUBDIVISIONS OF MEXICO, 1940

Political subdivision	Area in sq. mi.	Population	Population per sq. mi.
Federal district . . .	572	1,757,530	3,072.6
States			
Aguascalientes . .	2,498	161,693	64.7
Campeche . .	19,667	90,460	4.6
Chiapas . .	28,724	679,885	23.7
Chihuahua . .	94,806	623,944	6.6
Coahuila . .	58,052	550,717	9.5
Colima . . .	2,009	78,806	39.2
Durango . .	47,679	483,829	10.1
Guana-juato . .	11,802	1,046,490	88.7
Guerrero . .	24,881	732,910	29.5
Hidalgo . .	8,056	771,818	95.8
Jalisco . . .	31,144	1,418,310	45.5
México . . .	8,266	1,146,034	138.6
Michoacán . .	23,196	1,182,003	51.0
Morelos . .	1,916	182,711	95.4
Nayarit . .	10,442	216,698	20.8
Nuevo León . . .	25,130	541,147	21.5
Oaxaca . .	36,365	1,192,794	32.8
Puebla . .	13,122	1,294,620	98.7
Querétaro . .	4,431	244,737	55.2
San Luis Potosí . .	24,411	678,779	27.8
Sinaloa . .	22,576	492,821	21.8
Sonora . . .	70,465	364,176	5.2
Tabasco . .	9,780	285,630	29.2
Tamaulipas . .	30,726	458,832	14.9
Tlaxcala . .	1,554	224,063	144.2

Political subdivision	Area in sq. mi.	Population	Population per sq. mi.
Veracruz . .	27,752	1,619,338	58.3
Yucatán . .	14,864	418,210	28.1
Zacatecas . .	28,117	565,437	20.1
Territories			
Quintana Roo	19,435	18,752	0.9
Territorio Norte . . .	27,648	78,907	2.8
Territorio Sur	27,971	51,471	1.8
Total	758,061	19,653,552	25.8

Military service is compulsory, and the President holds supreme command of the armed forces, through the Secretary of War. The standing army (1940) was of 56,000, with 150,000 reserves and the force had 700 men and ninety planes, large materiel and manpower increases were effected during World War II. Mexican U. S.-trained 201st Fighter Squadron saw action in the Pacific in 1945. The national police force, little more than a police force, consists of six sloops, ten coast guard vessels and other minor craft.

EDUCATION. Illiteracy, affecting about 40 percent of the people, is one of Mexico's problems, and the government is trying hard to reduce the rate. Education is free and compulsory from six to sixteen, divorcing from religion and under Federal control. There were (1945) about 25,000 primary schools with two million enrollment. Secondary schools had enrollment of about 80,000. The ten universities had a total of 30,000 enrollment, of which 22,230 attended the University of Mexico, in Mexico City.

RELIGION. About 90 percent of Mexicans are Roman Catholics, but all religions are tolerated. The 1857 Constitution separates church and state. The church can not acquire property, and its present holdings are deemed to belong to the state. Priests, who must be Mexican-born, can not take part in politics.

GOVERNMENT CONTROL. Federal control of the national economy is ever increasing in Mexico. The government regulates food production, fixes minimum prices, and controls both exports and imports. Since 1930 it has consistently broken up large estates for distribution of land to the poor or state-owned communal farms. In 1941, the right to the land began to pass to the peasants themselves. The right to strike, a 48-hour week, fixed minimum wages and a social security system—all these have been established by the government.

AGRICULTURE. Some Mexicans still plow with forked sticks, but primitive methods are steadily giving way to the modern. About 10 percent of the 1945 Federal bud-

ent for irrigation projects. This brought 17 million acres the total of cultivated land, against a total estimated potential of more than 37 million acres. About 2½ million acres are irrigated now but the eventual total of watered land is expected to be 2 million acres. More than half of the land grows corn—a staple item in the national diet. The Yucatan peninsula, at the southern end of the Gulf of Mexico, raises more than half of the world supply of sisal hemp.

MAJOR AGRICULTURAL CROPS OF MEXICO, 1941

Crop	Acres	Tons
Alfalfa	103,740	1,990,361
Beans	1,659,840	176,392
Coffee	330,980	59,628
Corn	8,625,240	2,341,379
Cotton	780,520	88,778
Cucumbers	271,700	114,639
Potatoes	56,810	101,797
Rice	135,850	124,902
Sesame	259,350	64,731
Sugar cane	286,520	6,257,854
Wheat	1,368,380	351,284

Stockraising is important on non-arable land. Mexico's 1943 inventory of livestock showed 10,082,958 cattle, 1,887,478 horses, 21,343 mules, 2,159,734 asses, 3,673,887 sheep, 6,544,129 goats and 3,698,233 hogs.

INDUSTRY. Considering its cheap labor, abundant raw materials and available water power, Mexico is industrially backward. However, steady expansion is taking place. In 1940 there were 12,624 factories or shops with 332,323 workers and a product value of \$579,137,240. Leading establishments were cotton textile mills with estimated annual production of 600 million yards; sugar mills and distilleries; cigar and cigarette factories, the latter turning out 17 million packs in 1945; shoe, binder, wine and soap factories; chemical works; breweries; flour, paper and coffee mills; iron and steel mills and foundries; and cement, glass and ceramic works.

COMMERCE. Exports in 1944 totaled \$258,-6,558, including vegetable products, 36 percent; mineral products, 24 percent; and textiles, 10 percent. Imports came to \$216,-0,700, including vegetable products, 29 percent; mineral products, 22 percent; machinery and iron goods, 19 percent. In 1945, however, imports exceeded exports. A total of 87 percent of Mexico's trade is with the United States. Latin America gets 5 percent and Europe, mainly Britain, 3.9 percent.

GEOGRAPHY. Mexico is largely a great, high plateau, open to the north, with mountain chains on east and west and with lean-front lowlands lying outside of them. It has two big spears—the peninsula of

Lower California which is mountainous, and Yucatan peninsula which is mostly a low plain. The eastern mountains are marked by high volcanoes including Popocatepetl, 17,888 feet and not entirely extinct; Ixtaccihuatl, 17,323 feet; and the loftiest, Orizaba, 18,209 feet. None of Mexico's many short streams is navigable to any major extent.

CLIMATE. Partly in the torrid and partly in the north temperate zone, Mexico has three distinct climate regions. From the coasts inland to the plateau it is tropical with temperatures sometimes topping 100 degrees. The plateau is sub-tropical with an average of 75 degrees, and the mountains, over 6,000 feet, average 60 degrees. On the east coast the annual rainfall sometimes reaches 100 inches, while in Lower California rain hardly ever falls. Rainfall on the plateau runs twenty to forty inches a year, comparable to the west central United States. When U. S. baseball players went to Mexico they found that they could slug the ball tremendous distances through the rarefied air, but the same air made them tire quickly.

MINERALS. Mexico leads the world in silver production, mining about 40 percent of the total. It also is high in antimony, cadmium, lead, oil and zinc. The 1944 mineral value was \$146,408,500, of which precious metals totaled \$50,786,610. Most of the mining properties are foreign-owned and the industry is declining in relative importance. The oilfields, lying along the east coast, were seized by the government in 1938 and later the foreign owners were paid for them. There are seventeen plants and five refineries with daily capacity of 150,000 barrels.

FORESTS, FISHERIES. Mexican timberlands in 1945 were 25,893,993 acres, and 1942 production in cubic feet included pine, 33,315,000; mahogany, 1,315,250; red cedar, 1,045,320; white cedar, 432,600; and primavera, 91,820. Charcoal, resins and other by-products came to 50,265 tons. Yucatan produces nearly all of the world's chicle, the juice of the sapodilla tree, the base of chewing gum. Chicle exports in 1941 were 6,000 tons worth \$5,155,000. Mexico's fishing industry is small and local.

Mexico has about 15,000 railroad miles and the 1944 freight total was 17,117,277 tons, of which the nationalized lines carried more than half. There were 80,000 automobiles in 1940, and over 36,000 miles of improved highway in 1945. Merchant ships in 1940 totaled 1,657,899 gross tons, and Mexico's twenty-two seaports handled 5,683,391 tons. Vera Cruz and Tampico, both on the Gulf of Mexico, are the most important ports.

In 1943 Mexico had fourteen airline companies with 15,980 miles of routes. By early 1946, thirty-five companies were operating. Communication facilities include 25,719

miles of Federal telegraph lines, 17,066 miles of private and state-owned lines (1940), 200,000 telephones (1944), 350,000 radios and 141 broadcasting stations (1941).

Mexico's external debt (1942) was nominally estimated at \$235,000,000, of which 60 percent was held by Axis-controlled nationals, and 40 percent about evenly split among United States and British holders. The 1945 national budget was \$207,377,625 (\$227,150,000 in 1944) of which about two-thirds was divided among agriculture, education, national defense and communications. The government Bank of Mexico is the only bank of issue. In 1936 there were sixty-six other banks. U. S. direct investments in 1940 were \$357,927,000; British investments, (1944) were £137,834,190.

Monaco (Principality)

Area: .59 square miles (370 acres).

Population (census 1939): 23,973.

Density per square mile: 40,637.1.

Ruler: Prince Louis II.

Principal cities (census 1939): Monaco, 1,938; La Condamine, 11,339; Monte Carlo, 10,681.

Monetary unit: French franc.

Language: French.

Religion: Roman Catholic.

A tiny, hilly wedge driven into the French Mediterranean coast nine miles east of Nice, Monaco is a little land of pleasure with a pre-war tourist business that ran to 1,500,000 visitors a year. The home of world-famous Monte Carlo, a place of benign sun and balmy air, Monaco offers golf, tennis and bathing by day, and drinking, dining and gambling by night. Residents of Monaco are forbidden to enter the gaming rooms but they have compensations. They pay no taxes and most of them make good livings from the thriving tourist business.

Monaco, with its beautiful terraced hills and crags, had popular gaming tables as early as 1856. Five years later, a fifty-year concession to operate the games was granted to François Blanc, of Bad Homburg. This concession passed into the hands of a company in 1898, and was extended to 1947. All the governmental expenses are paid from the resultant revenue. The concession's annual license fee since 1936 has been 100,000 pounds. Under German occupation during part of World War II, Monaco had to submit to a curfew and a great loss of gaiety but the war's end saw it planning for a speedy return to the old days of pleasure and plenty.

Monaco's trade is, of course, small. It exchanges olive oil, oranges and perfume for wine and coal.

The Phoenicians, and after them the

Greeks, had a temple on the Monaco headland honoring Hercules. From Monakos, the Greek surname for this mythological strong man, the principality took its name. After being independent for two years, Monaco was annexed to France in 1793 by the French Revolutionists, and then placed under Sardinia's protection in 1815. In 1861 it went under French guardianship, but kept its independence.

Prince Albert of Monaco gave the principality a constitution in 1911, creating a national council of twenty-one members elected for four years. The government is under a ministry, acting on the prince's authority. The heiress to the throne, Princess Charlotte, renounced her claim to the throne in 1944 in favor of her son, Prince Renier, who was born in 1923.

Nepal (Military Oligarchy)

Area: c. 54,000 square miles.

Population (est. 1938): 5,600,000.

Density per square mile: 103.7.

Ruler: Mahārājadhīrāja Tribhuvana Bir Bikram Jung.

Prime Minister: Maharaja Sir Padma Shumshur Jung Bahadur Rānā.

Principal city and capital (est.): Katmandu 108,000.

Monetary unit: Nepalese rupee.

Racial stock: Gurkha (predominant), Magar, Gurung, Bhotia, Newar.

Languages: Pārbiatī, Gubhāijū, Tibetan.

Religions: Hinduism, Buddhism.

HISTORY. A landlocked country about the size of Iowa, lying between India and Tibet, Nepal has two great distinctions. It contains Mt. Everest, 29,141 feet high, the tallest measured mountain in the world. And it produces some of the toughest fighting men in the world—the Gurkhas.

The Gurkhas, led by Rajah Prithvi Narayana, invaded Nepal from India in 1768 and conquered it. Today they are the dominant people in the land. A commercial treaty was signed with Britain in 1792, and in 1815 after a year's hostility the Nepalese agreed to allow British residents to live in Katmandu, the capital. In 1923 Britain recognized the absolute independence of Nepal.

Nepalese troops assisted the British during the Indian Mutiny, the Tibet War, 1904, World War I, the Afghan hostilities of 1919 and World War II.

GOVERNMENT. Theoretically, the king is supreme but actually real power since 1867 is with the prime minister, picked from among the ruling family whose members are Hindu Rajputs. Under the prime minister is a council consisting of members of the ruling family, the military, high priests and other high officials. The predominant Gurkhas are essentially

ilitary caste. The army numbers about 0,000 regulars and 25,000 reserves. Over 0,000 Gurkha volunteers fought with the Indian Army in the Burma campaign of World War II, supplying most of the personnel of three famous regiments—the Assam Rifles, Assam Regiment and Burma Rifles.

SOCIAL AND ECONOMIC CONDITIONS. Nepal has a college at Katmandu and many schools in the main valley. Cultivated and irrigated where possible, the valley grows rice, wheat, pulse, fruits and vegetables, spices, sugar cane and potatoes. A few sheep and cattle are grazed. Manufacturing is limited to native handicraft. Trade with India passes through various frontier stations, and there are two mountain trade routes to Tibet.

Main exports include hides, skins, opium, gums, resins, dyes, jute, wheat, pulse, rice, and furs and timber. Major imports include iron, cattle, sheep and goats; salt, sugar, tobacco, raw cotton, oil, and textiles. Two roads enter Nepal—one from Raxaul to Amleikganj, the other from Jayauagar to Bijulpora. Communication is for the most part difficult and motorable roads are almost non-existent.

NATURAL FEATURES AND RESOURCES. Along its southern border, Nepal has a strip of level land which is partly forested, partly cultivated. North of that is the range of the Himalayan Range including Annapurna and many peaks over 20,000 feet. Mineral resources, nearly all unexploited, include lignite, copper, zinc, lead, sulphur, marble and iron. Southern Nepal has valuable forests which yield gum, timber, resin and dye. Hemp plants grow wild.

Netherlands (Kingdom)

(Koninkryk der Nederlanden)

Area: 12,742 square miles.

Population (est. 1945): 9,130,000.

Density per square mile: 716.6.

Governor: Queen Wilhelmina.

Prime Minister: Dr. L. J. M. Beel.

Principal cities (est. 1942): Amsterdam, 790,000 (capital, financial center); Rotterdam, 616,000 (chief port); The Hague (s'Gravenhage), 235,000 (seat of government); Utrecht, 163,559 (railway center); Haarlem, 137,576 (tulip center).

Monetary unit: Guilder.

Racial stock: Dutch.

Language: Dutch.

Religions (1930): Catholic, 36.4%; Dutch Reformed (Presbyterian), 34.2%; Other Protestant, 11.0%; Jewish, 1.4%; Others and no creed, 14.0%.

The Netherlands is small, half again as small as Massachusetts, but it is densely populated, is a major colonial power, and was

eighth from the top in world trade at the start of World War II. Occupied harshly by the Nazis until May of 1945, the Netherlands emerged with a fairly-well salvaged economy and with somewhat less of the political chaos that gripped much of Europe. The middle-of-the-road Catholic Party held a plurality in the national government, but in the 1946 elections in Amsterdam, the nation's largest city, the Communists were able to win more municipal council seats than any other party.

HISTORY. Julius Caesar found the low-lying Netherlands inhabited by Germanic tribes, the Frisii and Batavi but he was unable to conquer them and the Batavi on the Roman frontier did not submit to Roman rule until 13 B. C., and then only as allies. In the 8th century the area became part of Charlemagne's empire, and then was gradually split up into small feudal states which passed to the hands of Charles the Bold, Duke of Burgundy, in the 15th century. Royal marriage and royal inheritance shoved the Netherlands first under the Austrian Hapsburgs and then under Spanish rule. When Philip II of Spain suppressed political liberties and the growing Protestant movement in the Netherlands, a revolt was led by William the Silent, Count of Nassau and Prince of Orange. Under the Treaty of Utrecht in 1579, the seven northern provinces became in 1581 the Republic of the United Netherlands.

The Dutch East Indies Company had been established in 1602 and by the end of the 17th century, Holland was one of the great sea and colonial powers of Europe. In 1688 William III of Orange and his wife, Mary, the elder daughter of James II of England, became King and Queen of England. The power of the republic declined in the 18th century through the wars with Spain and France and in 1795 French troops ousted the last stadholder William V. The Batavian Republic was organized. It became a kingdom in 1806 under Napoleon's brother, Louis and in 1810 was incorporated into the French Empire.

Following Napoleon's defeat, the United Netherlands and Belgium became the "Kingdom of the United Netherlands" under William I, son of William V and head of the House of Orange. The Belgians withdrew in 1830 forming their own kingdom. William I abdicated in favor of William II in 1840; the latter was largely responsible for the promulgation of a liberal constitution in 1848. The Netherlands continued to prosper during the long reign of William III from 1849 to 1890. The male line of the House of Nassau became extinct with his death in 1890 and he was succeeded by his 10-year old daughter, Wilhelmina, who was crowned Queen in 1898. Neutrality was maintained during World War I, but overseas trade suffered heavily from the

Allied blockade and German submarine warfare.

The premier from 1933 to 1939, except for brief intermissions was Dr. Hendrick Colijn, leader of the Protestant Anti-Revolutionary Party. At the outbreak of World War II neutrality was proclaimed, but German troops invaded the country May 10, 1940, and by May 15 Dutch troops were ordered to lay down their arms. Queen Wilhelmina and Crown Princess Juliana fled to London where a government-in-exile was established under Premier P. S. Gerbrandy. The German Army in the Netherlands capitulated May 5, 1945 and on May 23, the Dutch cabinet met once more in the Hague and tendered its resignation to Queen Wilhelmina. A new cabinet was formed on June 23 under the leadership of Professor Willem Schermerhorn, a resistance leader and leader of the Labor party. The Catholic party obtained a plurality in the May 1946 elections and its leader, Dr. L. J. M. Beel formed a Labor-Catholic cabinet (July 2).

GOVERNMENT. Queen Wilhelmina, born August 31, 1880, daughter of King William III, succeeded to the throne November 23, 1890; assumed the government September 6, 1898, married (1901) to Henry, Prince of Mecklenburg Schwerin, born 1876, died 1934. Heir-apparent: Princess Juliana, born April 30, 1909, married on January 7, 1937 to Prince Bernhard zu Lippe-Biesterfeld, born 1911. Offspring: Princess Beatrix, born 1938; Princess Irene, born 1939, Princess Margriet Francisca, born 1943.

The Netherlands is a constitutional and hereditary monarchy, with female succession taking place only in default of male heirs. Executive power is vested exclusively in the sovereign, while legislative power rests with the sovereign and the States-General (Parliament). The upper chamber of Parliament, fifty members, is elected for 6 years by the provincial states. The lower chamber which shares with the government the privilege of initiating new bills and proposing amendment consists of 100 deputies who are elected directly for four years and retire en bloc. The executive power is in part exercised by responsible ministers, headed by the premier, who hold office at the pleasure of the sovereign. Certain legislative and many executive matters are normally referred to the State Council (Raad van Staat) consisting of fourteen members appointed by the sovereign. Suffrage is universal for all Dutch subjects of twenty-five years of age. Elections are on a basis of proportional representation and the sovereign has the power to dissolve either or both chambers, subject to new elections within forty days and the convocation of a new assembly within two months.

PROVINCIAL. Each of the eleven provinces has a local representative body—a Provin-

cial State—presided over by a royal commissioner. The State collects local taxes and legislates on local matters. Routine administrative work of the province is carried on by six members called the Deputed States. Each of the 1,054 communes has a locally elected council and a mayor appointed by the crown.

No cases are tried by jury. Minor offenses are tried by one judge in the cantonal courts of which there are sixty-two. More serious cases are tried by one of the 19 district tribunals with one or three judges. Beyond these are five courts of appeal, which in turn are subject to the High Court sitting at the Hague with five judges. All judges are appointed for life by the sovereign and can be removed only by decision of the High Court.

DEFENSE. Military service is compulsory with an initial training period of one year beginning at twenty with service on reserve until forty for enlisted men, to forty-five for non-commissioned officers and to fifty for officers. The partially mobilized Dutch army in 1939 consisted of 500,000 active troops and 160,000 reserves. The air force had 600 personnel and 325 planes. The Navy, the Army, the East Indies Army have separate air forces. The Netherlands fleet on Dec. 31, 1945 included 2 cruisers, 8 destroyers, 12 submarines, 3 sloops, 1 frigate and 4 fleet minesweepers. The light aircraft carrier Nairana (14,000 tons), 4 destroyers and 3 submarines were obtained from the British navy in early 1946. Bases are maintained in Holland, the Netherlands East Indies and in the Caribbean.

EDUCATION. In 1938 elementary schools numbering 7,812, of which 5,006 were private, had a total enrollment of 1,242,778. 288 secondary schools had 62,301 students. The 6 universities had 9,471 students. The four public universities are Leiden (founded 1575), Utrecht (1636), Groningen (1414) and Amsterdam (1632); the two voluntary universities are the Calvinist University of Amsterdam and the Roman Catholic University of Nijmegen. Education is compulsory from the ages of seven to thirteen. By an act passed in 1920, religious bodies are allowed to maintain denominational schools fully supported by the state.

RELIGION. The royal family and a large number of the inhabitants belong to the Dutch Reformed Church (Protestant), but there is complete religious freedom. Appropriations from the state budget are made for support of the Protestant, Roman Catholic, Jewish and Jansenist Churches. The Roman Catholic element is most marked in the southern provinces of Limburg and North Brabant.

POPULATION. In 1830 the Netherlands population was 2,613,500; in 1869, 3,580,000; in 1945, 9,130,000. In the immediate pre-

war period it increased about 100,000 a year, and today the Netherlands has the problem of too many people living in its small, crowded land. The birth rate (1936-38 annual average: 20.2) showed a distinct tendency to fall whereas further considerable decrease in the death rate (1936-38 average: 8.7) is scarcely possible.

AGRICULTURE. Nearly half the Netherlands lies below sea level. Of the total area of 6,595,362 acres, 2,602,384 is arable, 3,016,796 is meadowland, 168,995 is devoted to horticulture, arboriculture and fruit gardens and 693,052 is forested. Dutch farms are characteristically small with only a few over 250 acres. Dairying and dairy products are the most important branches of agriculture. In 1942 there were 2,440,553 cattle, 491,000 swine, 337,177 horses, 574,497 sheep. Poultry in 1938 numbered 30,521,292. Milk, butter and egg production are under state control; butter production in 1939 was 114,989 pounds; cheese, 102,889 tons. Large quantities of vegetables and fruits are raised for export. Almost as important as the dairy industry is the raising of tulip, hyacinth and other flower bulbs in the area around Haarlem. The Netherlands food crop harvested in 1945 was about 20 percent below the prewar level, and livestock production was less than 50 percent of prewar.

INDUSTRY. Most Netherlands industries derive from agriculture. The country is poor in mineral resources. An exception is the textile industry, which was the leading industry in 1938, with 50,374 workers and output valued at \$102,622,040; followed by the clothing industry, 38,242 workers and output of \$62,612,894; food industry, 7,184 workers and output of \$45,663,000; paper, 6,296 workers and output of \$20,787,351. The shipbuilding industry in 1937 had 34,458 workers and output valued at almost \$80,000,000. In 1938 there were 268 distilleries, 11 sugar refineries, 3 beet sugar factories, 110 breweries and 2,694 tobacco factories. Amsterdam is one of the world's leading diamond-cutting centers.

TRADE. At the start of World War II the Netherlands ranked 8th in world trade. Exports in 1938 were \$571,629,000; imports, \$778,650,000, excluding the transit trade with Germany and Central Europe which was of prime importance. The major exports by percentage, were: textiles, raw and manufactured, 8.3; coal and coke 6.2; butter 4.2; iron and steel 3.3; cheese 2.8; fertilizer 2.2; paper 2.1. Major imports, also by percentage, were: textiles raw and manufactured 10.4; cereals and flour 8.2; iron and steel 8.2; wood 4.6; coal and coke 3.7; mineral oil 2.2. Principal customers, also by percentage, were Britain 22.5, Germany 15.3, Belgium and Luxembourg 10.2, Colonial Empire 9.6, France 5.8 and United States 3.6. The major sources, again by percentage, were Germany 21.8, Belgium

and Luxembourg 11.5, United States 10.8, Britain 8.1, Colonial Empire 7.2 and France 4.6.

COMMUNICATIONS. The merchant fleet in 1939 included 1,532 vessels, of 2,972,000 gross tons but war losses cut this to 300 vessels of 1,614,094 tons in 1945. In 1938 a total of 21,096 vessels entered Dutch ports with a tonnage of 31,794,000. Of these, 70.9 percent entered Rotterdam. An extensive network of rivers expanded by many canals has led to a good development of inland shipping. The length of navigable canals and rivers in 1939 was 4,816 miles. The wealth of water transport has obviated wide railway development. In 1938 there were 2,278 miles of railway, all privately owned, and 15,793 miles of highway. In 1939 there were 747,053 radio sets and in 1942, 498,220 telephones.

FINANCE. Ordinary revenue in 1940 was estimated at \$394,000,000; expenditures at \$393,800,000. Public debt in March, 1944 was \$5,680,000,000. The Netherlands and its colonial empire ranked 6th in U. S. lend-lease assistance receiving \$178,054,000 worth of goods and supplies.

NATURAL FEATURES AND RESOURCES. Part of the great plain of north and west Europe, the Netherlands has maximum dimensions of 190 by 160 miles and is low and flat except in Limburg in the southeast where some hills rise to 300 feet. About half the country's area is below sea level, making the famous Dutch dikes a requisite to use of much land. Reclamation of land from the sea through dike-building has continued to recent times, and such land is usually very fertile. The province of Zeeland consists mainly of six delta islands guarding the mouth of the Scheldt River and the entrance to Belgium's port of Antwerp. Off the northwest coast are the sandy West Frisian Islands, lying from three to twenty miles out and stretching from the Zuider Zee to the German coast.

All drainage reaches the North Sea, and the principal rivers—Rhine, Maas and Scheldt—have origin outside the country. The Rhine is the most heavily used waterway in Europe and nearly three-fourths of its 75 to 85 millions of tons of annual traffic is handled through the Netherlands port of Rotterdam.

Marsh mists, sea fogs and a humidity exceeding 80 percent mark the Netherlands climate which produces colder winters than in eastern England at the same latitude. Utrecht, roughly central in location, has a January average of 32.4 degrees in temperature, and a July average of 62.6. Average rainfall for the country is about 28 inches.

Netherlands minerals are few. The only important ones are coal, 14,176,680 tons in 1939; lignite, 250,153 tons in 1939; and salt, 181,070 tons in 1938. There also are

peat swamps and about 700,000 acres of forest. The Netherlands fishing fleet in 1938 totaled 3,380 vessels and made a total catch of 240,669 tons valued at \$10,739,407. Herring—107,808 tons worth \$4,620,765—was the most important item.

NETHERLANDS OVERSEAS TERRITORIES

Country	Area (sq. mi.)	Population (est. 1941)
ASIA		
Netherlands Indies	735,268	71,534,000
AMERICA		
Curaçao	403	119,585*
Surinam (Dutch Guiana)	54,291	189,484†

*Est. 1943.

†Est. 1944.

NETHERLANDS INDIES: See **NETHERLANDS INDIES.**

CURACAO. *Status:* Autonomous part of Netherlands state. *Capital:* Willemstad (pop. 1943: 33,000). *Governor:* Dr. Pieter A. Kasteel. *Foreign trade* (1939): Imports, \$164,006,000 (80 percent oil); exports, \$183,508,000 (98 percent oil). *Agricultural products:* Aloes, beans, corn. *Manufactures:* Refined petroleum, straw hats. *Mineral products:* Lime phosphate, salt.

The territory is two groups of islands about 500 miles apart; one, about 40 mi. north of the Venezuelan coast consists of Curaçao (210 sq. mi.), Bonaire (95 sq. mi.) and Aruba (69 sq. mi.); the other, lying to the northeast, consists of 3 small islands with a total area of 29 sq. mi. The Dutch acquired it from Spain in 1634 and have since held it except for short intervals during the Napoleonic Wars. The U. S. accepted the invitation of the Netherlands government in Feb. 1942 to dispatch troops to Curaçao to cooperate in its defense. Administrative officials include the governor (appointed by the crown) and an elected council.

The backbone of Curaçao's economy is the refining of crude oil which comes from the adjacent Maracaibo fields in Venezuela. The refinery on Aruba, the world's largest, completed in 1945 the processing of the 1,000,000,000th barrel of oil since its opening in 1929. Aside from native Curaçaoans, there were on the island 7,511 English, 5,156 Dutch and 4,213 Venezuelans in 1943. Dutch is the official language but many inhabitants speak a patois known as Papiamentu, a mixture of Spanish, Dutch, African, and Portuguese elements. Only a small part of the trade is carried on with the homeland.

SURINAM. *Status:* Autonomous part of Netherlands state. *Capital:* Paramaribo (pop. 1944: 60,723). *Governor:* Dr. J. C. Brons. *Foreign trade* (1944): Exports, 6,-880,780 florins; imports, 15,645,344 florins

(1 florin=\$0.53). *Agricultural products:* Rice, sugar, coffee. *Minerals:* bauxite (1944: 689,800 tons), gold (1944: 177,943 grams). *Forest product:* Balata (about 275 tons annually).

Surinam lies in northeastern South America between British and French Guiana. It was received by the Dutch at the peace of Breda (1667) in exchange for New York and at that time included British Guiana which was seized by England in 1803 and formally ceded to her at the conclusion of the Napoleonic Wars. The United States and Brazil accepted the invitation of the Dutch Government on Nov. 24, 1941, to cooperate in the defense of the bauxite mines. The governor (appointed by the crown) is assisted by a partly elected legislative council.

Mining is the most important activity and only about 65,000 acres are under cultivation.

The heterogeneous population includes approximately 1,000 Dutch, 1,000 other Europeans, 2,400 Chinese, 19,000 Djukans (descendants of escaped slaves), 2,600 aboriginal Indians, 70,000 Negroes and Mulattoes, as well as 85,000 East Indians (British India and Java) laborers brought in after the abolition of slavery (1863) to work the sugar plantations.

The climate throughout is tropical and from its settled coastal plain, Surinam runs back to a virtually unexplored mountain and jungle area along the Brazilian border. Rivers are the chief means of interior travel.

Netherlands Indies (Part of Netherlands state)

(Nederlandsch-Indië)

Area: 735,268 square miles.

Population (est. 1940): 70,476,000.

Density per square mile: 95.8.

Governor General: Dr. Hubertus van Mook.

Principal cities (census 1930): Batavia, 439,184 (capital); Soerabaja, 341,675 (seaport, naval base); Semarang, 217,796 (seaport, central Java); Bandoeng, 166,815 (commercial center, west Java); Soerakarta, 165,484 (sugar, tobacco).

Monetary unit: Dutch guilder.

Racial stock (1930): Native except for 1,190,014 Chinese, 240,162 European (mostly Dutch and Eurasian), and 7,195 Japanese.

Languages: Javanese, Sundanese, Madurese, Malay, Dutch.

Religions: Mohammedian (predominant); Christian (about 2,500,000), Brahmin, Animism.

The Netherlands Indies, a group of islands with total area nearly two and half times that of Texas, constitute one of the world's richest colonial areas. The islands—Sumatra, Java, Madura, cent-

and southern Borneo, Celebes, western New Guinea and the Moluccas—would reach from New York to London if their extent was transposed to the Atlantic. They are more than fifty-seven times the size of the mother country, the Netherlands, and have great wealth in tin, rubber, spices, oil, quinine and copra.

In the 1st century A. D., most of the islands came under the influence of Hindu priests and traders who spread their culture and religion. Moslem invasions began in the 13th century and most of the area was Moslem by the 15th century. Portuguese traders arrived early in the 16th century but were ousted by the Dutch who showed up in about 1596. After Napoleon subjugated the Netherlands homeland in 1811, the British seized the islands and returned them to the Dutch in 1816. Political and economic reforms were introduced about 1870, and in 1903 the natives won a part in local affairs. In 1922 the islands were made an integral part of the Netherlands kingdom.

In World War II, Japanese troops began their attacks in early 1942, and took Batavia on March 5 and the big naval base at Soerabaja on March 10. Japanese military occupation with nominal native self-government continued until August of 1945, except in outlying parts of New Guinea and Borneo. About the time of the Japanese surrender, a self-styled Indonesian republic headed by Achmed Soekarno sprang up and took over effective control of parts of Sumatra and Java. Allied forces, mostly British Indian troops, moved in and fighting between them and the nationalists continued for many months. Meanwhile the nationalists and the Netherlands officials negotiated for a compromise on the status of the islands.

Before the Japanese occupation, a governor general appointed by the Dutch crown was the highest executive authority in the islands. He was assisted by a five-man advisory council which included two Indonesians. In internal affairs, the islands were self-governing, through the governor general and a legislature of sixty members, half of them Indonesians, more than half of them elected by indirect ballot. Indirect rule through native sultans was permitted in some outlying islands. Indonesians held many posts in local government.

The army, separate from that of the homeland, was 50,000 strong in 1942, including about 10,000 military police. Conscription for Indonesians was introduced in 1941. About a third of the regulars were European, mostly Dutch. Officers, with few exceptions, were Dutch. Naval forces consisted of units of the Royal Netherlands Navy, and also of a local navy.

There are more than 20,000 native schools

with more than 2,500,000 pupils, and 628 European-type schools with 150,000 students, but the illiteracy rate is high. There are institutions of higher learning at Batavia and Bandoeng, and numerous schools are maintained by Christian missionaries. The islands of Java and Madura, with only 7 percent of the area, have more than 67 percent of the population, and are among the most densely settled areas in the world. The natives, including about 137 races and tribes, are mainly of Malayan stock, with the Javanese the most advanced.

Agriculture engages about 70 percent of the adult males. Rich in a variety of crops, the islands produce about 31 percent of the world's copra, 37 percent of its rubber, 83 percent of its pepper, and nearly all of its quinine. The big-estate agriculture on Java and Sumatra is devoted mainly to export. The rest is subsistence agriculture. Rice is the staple food and chief crop, with 1939 production for Java and Madura alone about 6,912,517 tons. Sugar cane, rubber, tea, coffee, tobacco and quinine are the leading estate products. Corn, kapok, agava fiber, tapioca, spices, fruits and vegetables are also main crops. Livestock, important to the natives, included in 1939 a total of 3,246,918 carabaos, 4,576,602 cattle and 703,633 horses.

MAJOR AGRICULTURAL PRODUCTS, 1940

Crop*	Metric tons
Sugar cane	1,587,364
Rubber	546,021
Palm oil	241,702
Tea	81,986
Coffee	77,647
Tobacco	27,414
Quinine	16,371
Cacao	1,533

*Complete rice statistics are not available.

Industry, especially in Java, developed rapidly after 1930. In addition to industries connected with the processing of the rich natural products, there were established chemical works, textile and paper mills, soap factories, breweries, shipyards, a Goodyear tire and rubber plant and a General Motors assembly plant. In 1940 there were 5,469 manufacturing plants with 288,941 workers. Cottage industries, mainly on Java, also were important.

Exports in 1939 totaled \$394,479,000, including rubber, oil, sugar, cement, minerals, metals, sulphur and tea. Imports were \$250,460,000 including thread cordage and clothing, machinery, minerals and chemical products.

In 1940 there were 43,415 miles of road, mostly in Java and Sumatra; and 4,620 miles of railway, of which 3,387 were in Java and 1,233 in Sumatra. Regular steamship service is available among the islands,

and to Australia, South Africa and South America. In 1939 a total of 10,870 steamers, about half of them Dutch, with total tonnage of 12,456,654, cleared from island ports. The Royal Dutch Airline provided twice-a-week air service to Europe.

The last prewar budget, in 1942, anticipated revenue of 750,918,773 guilders, and expenditure of 813,802,815 guilders. The national debt in 1940 was \$763,593,868.

A backbone of high mountain ranges with many snow-capped peaks extends throughout the main islands of the archipelago. Earthquakes are frequent and there are many active volcanoes, ninety of them in Sumatra. Borneo and New Guinea are heavily forested with interiors that are difficult to penetrate. The climate throughout the group is equatorial and monsoonal, with little variation of temperature and rainfall averaging over 100 inches a year.

Oil is the principal mineral product of the Netherlands Indies. The fields, in Sumatra, east Borneo and east Java, held largely by the Royal Dutch Petroleum and Standard-Vacuum companies, produced 62,100,000 barrels in 1939, which was 3 percent of the world total. The islands' output of 30,100 tons of tin in 1939 amounted to 16 percent of world supply. Other 1939 mineral production included: coal, 1,934, 537 tons; gold, 89,069 ounces; bauxite, 254,265 tons; silver, 678,045 ounces; and asphalt, sulphur, diamonds and manganese.

Forests, covering a large part of the islands, yield such products as timber, rattan, bamboo, gum, wild rubber, gutta-percha and gutta jelutong and quinine. The principal timber is teak, found mostly in east Java; 1939 production was 10,876,949 cubic feet. Ebony, sandalwood and ironwood also are cut.

There are extensive fisheries among the islands. Shells, coral and tortoise shell are collected for export.

Nicaragua (Republic)

(República de Nicaragua)

Area: 57,143 square miles.

Population (est. 1943): 1,048,642.

Density per square mile: 18.3.

President: General Anastasio Somoza.

Principal cities (census 1940): Managua, 83,546 (capital); León, 30,573 (trading, RR center); Granada, 24,843 (trading); Masaya, 19,827 (coffee growing).

Monetary unit: Córdoba.

Racial stock (1930): Mestizo, 69%; White, 17%; Negro, 9%; Indian, 5%.

Language: Spanish.

Religion: Roman Catholic.

Nicaragua's Indians were converted to Catholicism by the Spaniards in 1522 and

the country was part of Spanish Guatemala until the general Central American revolution in 1821. Upon the dissolution of the Central American Union in 1838, the country established itself independently. A United States Naval force intervened in Nicaragua in 1909 after two American citizens had been executed, and a few U. S. Marines were kept in the country from 1912 to 1925. The Bryan-Chamorro Treaty of 1916 gave the United States an option on a canal route through Nicaragua, and Naval bases in the Bay of Fonseca on the Pacific coast and Corn Island on the Atlantic side. Disorder after the 1924 elections brought U. S. Marines on the run again but they were withdrawn gradually after the U. S.-supervised elections of 1928, although sporadic fighting continued between government troops and rebel forces under General Augusto Cesar Sandino. Juan B. Sacasa was elected president in the U. S.-supervised 1932 elections, but he was forced to resign in 1936. General Anastasio Somoza, elected president in December of 1936, restored political and economic stability. He was re-elected in 1939 and is now the virtual dictator.

The Constitution of 1939 provides a president, popularly elected for six years, and a two-house Congress—a 40-member Chamber of Deputies and a 15-member Senate—both elected for six years. Congress elects Supreme Court judges for six years, and judges of the five Courts of Appeal for four years. There are fifteen regional departments. Military service is voluntary. The Guardia Nacional, both an army and police force, numbers about 3,500. A Naval base built at the Pacific port of Corinto by the United States in World War II was turned over to Nicaragua in 1946. The country maintains a sea patrol against smuggling.

Although primary education is free and compulsory about 60 percent of the people are illiterate. There are three universities and several vocational schools. Primary schools in 1942 numbered 943 with a 63,380 enrollment; eleven secondary schools had 2,750 enrolled. Western Nicaragua, with about 75 percent of the population, is inhabited principally by mestizos of mixed Spanish and Indian blood, with some whites and many Indians. Negroes and Indians are dominant in eastern Nicaragua.

More than half of Nicaragua is still jungle-covered. Agriculture, the leading industry, cultivates only 10 percent of the land total. Coffee, 22,233,654 lbs. in 1945 is the chief crop and grows in the western part, which also produces sugar cane, cacao, corn, beans, rice and tobacco. Bananas lead in the eastern part, with cotton second. About 900,000 acres are devoted to livestock grazing. Except for some sugar refining, only locally consumed products are manufactured.

Exports in 1944 totaled \$15,412,455 against imports of \$10,279,451. In 1943 gold was about half of exports, and coffee about a quarter. Bananas normally are about a sixth. Other items are timber, cotton, cattle, sugar, ipecacuanha and cacao. Cotton textiles, machinery, food and varied products are imported. In 1943 the United States supplied 61 percent of the imports, and Mexico, 22 percent, while 89 percent of the exports went to the United States.

Good highways, long lacking, are now being constructed. Railway mileage, mostly nationalized and limited to the west, was only 258 miles in 1944. TACA and Pan American both supply air service. Corinto and San Juan del Sur, on the Pacific, are the chief ports. A canal route, giving both Nicaragua and Costa Rica water transport from the Caribbean to the Pacific, is planned using the San Juan River, which makes up about half the boundary between the two countries. Nicaragua's public debt in March, 1945, was estimated at \$5,378,000.

Largest but most thinly populated of the Central American nations, Nicaragua is mountainous in the west, with fertile valleys. A plateau slopes eastward toward the Caribbean. Two big lakes—Nicaragua, about 100 miles long, and Managua, about thirty-eight miles long, are connected by the Tipitapa River. The Pacific coast is bald and rocky; the Caribbean coast, swampy and indented and aptly called the "Mosquito Coast." The highlands have pleasant temperatures, while the coasts are hot and sultry, with the east coast pelted by up to 100 inches of rain a year.

Gold, 219,579 troy ozs. in 1944, has surpassed coffee as the most lucrative export. Silver production in 1944 was 254,457 troy ozs. One-third wooded, Nicaragua produces mahogany, rose wood, cedar and rubber. Dyewood exports in 1943 were 913,764 bd. ft., and lumber, 11,941,965 bd. ft.

Norway (Kingdom)

(Norge)

Area: 124,556 square miles.

Population (est. 1943): 3,050,000.

Density per square mile: 24.5.

Sovereign: King Haakon VII.

Prime Minister: Einar Gerhardsen.

Principal cities (est. 1938): Oslo, 275,000 (capital, chief port); Bergen, 106,500 (seaport, shipbuilding); (census 1930) Trondheim, 54,458 (seaport, timber, fish); Stavanger, 46,780 (seaport, fisheries).

Monetary unit: Krone.

Racial stock (1930): Norwegian, 98.7%; Swedish, .8%; Others, .5%.

Language: Norwegian.

Religions: Lutheran Christian (state), 96.8%; Others, 3.2%.

Emerging in 1945 from the harsh German occupation of World War II, Norway faced the problem of rebuilding a shattered economy and of replacing the 50 percent losses suffered by its merchant shipping fleet, once the fourth greatest in the world. To achieve these goals, the government launched a five-year plan with the goal of full recovery planned for 1950. The country, about the size of New Mexico and the most thinly-populated nation in Europe, leads the world in whaling and is one of the world leaders in fishing. It is very mountainous and forested and with a coast line slashed hundreds of times by deep fjords.

Norwegians, closely allied to Swedes and Danes, are of Teutonic origin. In the 7th and 8th Centuries Vikings from Norway constantly attacked the British Isles, and in the 9th Century many of them settled in what are now Eire and Normandy. Norway became a united kingdom in 872 under King Harald Haarfager. Christianity was introduced in the 10th Century by King Olaf I Under Haakon, from 1217-63 Norway reached a peak of power, ruling the Shetland and Orkney Islands, Iceland, Greenland and the Hebrides. In 1319 Norway and Sweden united under King Magnus, and in 1397 Denmark joined this union under Erik of Pomerania. In 1450 the triple bond gave way to a union in which Norway was closer to Denmark, but the Treaty of Kiel, in 1814 after the Napoleonic Wars, ceded Norway to Sweden. Norway protested, declared itself independent. Sweden invaded Norway and forced the issue, declaring Norway to recognize the king of Sweden but leaving Norway its own parliament, government, army, navy and customs.

After this union was dissolved in 1905, Prince Karl of Denmark was elected king of Norway by the Storting and he ascended the throne as Haakon VII. In World War I Norway was able to preserve its neutrality though it suffered greatly from the allied blockade and from the loss of many merchant ships. In World War II, Norway was invaded on April 8, 1940, by the Germans and resisted for sixty-two days before Nazi control was complete. On June 7, King Haakon and the government fled to London and established a government-in-exile, called the Nygaardsvold government and expanded in London to include all political parties.

QUISLING. Meanwhile, in Norway, a new word was born—quisling. It was derived from Major Vidkun Quisling, a Norwegian traitor who collaborated with the Germans, and who was Minister President of the German-sponsored occupation government. Quisling, who eventually was executed as a traitor in October of 1945, was responsible throughout his rule to Josef Terboven, the Nazi administrator of Norway.

Following the collapse of the Germans, the government returned to Norway on May 31, 1945, and King Haakon landed on June 7. The Nygaardsvold government resigned as was previously agreed upon. Paal Berg, leader of the resistance movement, was named by the king to form a cabinet but he failed because of Conservative and Communist opposition. Another resistance leader, Einar Gerhardsen, subsequently formed an interim coalition government. The general election held on Oct. 8, 1945, resulted in a Labor majority and Premier Gerhardsen formed an all-Labor government November 1, 1945.

SOVEREIGN. King Haakon VII, born August 3, 1872, second son of Frederick VIII of Denmark, married Princess Maud, (born 1869, died 1938) third daughter of Edward VII of England. They had one son—Olaf, Crown Prince, born July 2, 1903, who married Princess Märtha of Sweden (born 1901) on March 21, 1929. Their children: Princess Ragnhild Alexandria (born 1930), Princess Astrid (born 1932), Prince Harald (born 1937). King Haakon is the brother of Christian X of Denmark.

GOVERNMENT. Norway is a constitutional and hereditary monarchy with succession in the direct male line. The king's executive power is exercised by a council of state, or cabinet, consisting of the prime minister and at least seven other councilors. The 150 members of the Storting are popularly elected for a term of 4 years under proportional representation. When assembled, the Storting divides itself by election into two sections, the Lagting composed of one-fourth of the members (thirty-eight) and the Odelsting composed of the rest. The Storting has a predominant position in the government since the cabinet is responsible to it. Moreover, the king cannot dissolve it before the expiration of its term. There is universal suffrage for all citizens male or female over twenty-three years of age.

The judicial system consists of 101 courts of first instance, five regional courts of second instance and a supreme court composed of a president and four other justices.

The country is divided into twenty districts—eighteen counties (Sylker) and the cities of Oslo and Bergen. Other towns are formed into 65 communes. The chairmen of local councils of the 682 rural communes form county diets headed by the county governor who is appointed by the king.

The department of defense serves as a coordinating body for the army, navy and air force. The army is a national militia with compulsory service from 18 to 55. Liability for military training which lasts for eighty-four days begins at the age of 21. In 1939 there was a standing army of 15,000 and 120,000 reserves. The Navy on Dec. 31, 1945, had 7 destroyers and large

torpedo boats, 3 submarines, 4 corvettes, 3 minelayers, 2 old coast defense ships and a number of smaller craft. Units of the army and air force received training in Britain during the war, while naval vessels co-operated with the Royal Navy. Army units cooperating with the British assisted in freeing northern Norway prior to the German surrender in May 1945.

SOCIAL AND ECONOMIC CONDITIONS. Education is compulsory and free from seven to fourteen. Illiteracy is almost unknown. In 1937-38 there were 357,719 students in the elementary schools, 31,127 students in the secondary schools and 15,033 students in continuation schools. The eleven schools of university rank had a combined enrollment of 4,998, of whom 4,118 attended the University of Oslo, founded in 1811. In addition, there are about 300 trade schools. The Norwegian language is closely akin to Danish and Swedish.

The endowed state religion to which the king must conform is Evangelical Lutheran. The king nominates the clergy of the established church, which takes a leading part in primary education. All other Christian religions are tolerated, but Jesuits are barred.

The average annual birth rate (1936-38) was 15.2. The average annual death rate was 10.3, the lowest in Scandinavia. From 1820 to 1920 there were over 800,000 emigrants of whom 96 percent went to the United States. The well-advanced social welfare program includes social security, introduced late in the 19th century, poor relief, care of mothers and children, schools for the blind, deaf and deformed, housing, training of social workers and old age pensions. Labor is protected by a number of acts which provide for vacations, arbitration of disputes, and unemployment, accident, and sickness insurance. The cooperative movement is well-organized.

Norway is largely mountainous and the land suitable for cultivation, estimated at less than 5 percent of the total area, consists of comparatively narrow strips in the deep narrow valleys and around fjords and lakes. Foodstuff production is insufficient to meet the domestic needs. Major crops are wheat, barley, oats, hay, potatoes and fodder. The country is more adapted to stock raising than crop growing. In 1939 there were 1,455,016 cattle, 1,743,802 sheep, 203,931 horses, and 248,916 goats. There were also 527,104 foxes bred for fur. The total value of agricultural products for 1938 was 384,207,000 kroner; of furs, 30,000,000 kroner. Fairly good crops were harvested in 1945 in spite of the fertilizer shortage. Livestock numbers were greatly below prewar level except for horses and sheep.

Raw materials produced in Norway form the basis of most of the manufactures. In

1938 there were 4,505 manufacturing establishments with 162,803 workers and an output valued at \$496,371,507. Leading industries were wood and paper with output valued at \$102,578,281; food including fish canning, \$64,018,750; machinery and metals, \$77,790,941; and electro-chemicals, \$57,659,350. Norway is a leading shipbuilding nation.

In 1939 imports were valued at \$317,321,000; exports, at \$187,561,000. Major exports, by percentage, were: paper and manufactures 21.5, fish 16.1, chemical fertilizers 7.4, aluminum 4.6, iron and steel 6.9, ships 4.4, and silver fox skins 3.4. Major imports were ships 10, non-electrical machinery and apparatus 4.9, coal 5.7, petroleum 3.8, electrical machinery and apparatus 3.3, iron and steel 6.5, wheat 2.2. Chief suppliers, by percentage, were: Germany 19, Britain 16.9, Sweden 10.2, United States 10.8 and Canada 4.2. Major customers, also by percentage, were: Britain 24.1, Germany 14.6, United States 10.4, Sweden 10.6 and France 4.4.

Norway is one of the greatest seafaring nations and her merchant fleet of 588 vessels of 2,768,993 gross tons in 1945 was among the largest in the world. Her long coast line and difficult inland transportation conditions makes coastal shipping especially important, while shipping revenues yield important invisible exports. Wartime losses amounting to 2,393,000 tons were the third highest among the United Nations. In 1939 there were 2,420 miles of railway, mostly nationalized, and 25,677 miles of highway. Railways are confined to the southern half of the country except for a line which connects Narvik in the north with the Swedish iron ore mines.

Governmental expenditures in 1939 were \$144,821,310; revenues, \$156,911,372; U. S. investments in Norway, \$65,200,000; total national debt, \$340,028,640.

NATURAL FEATURES AND RESOURCES. Nearly 70 percent of Norway is uninhabitable and covered by mountains, glaciers, moors and rivers. Its extreme length from the Skagerrak to North Cape—Europe's most northern point far above the Arctic Circle—is about 1,100 miles. Breadth averages sixty miles, with a maximum of 260 miles. The hundreds of deep fjords that cut up Norway's coast line give it an overall ocean front of more than 12,000 miles. Along the Swedish border are the rugged Kjolen Mountains, and northeast of Bergen are the highest of Norwegian mountains, with Galdhopiggen rising to 8,097 feet. Islands off the coast numbering almost 150,000 form a breakwater and make a safe coastal shipping channel. The Lofoten Islands, off the northwest coast, have an area of about 1,560 square miles and are a cod fishing center.

Norway has many rivers and lakes. Most of the rivers are short and swift with

numerous falls and are invaluable as a source of hydroelectric power. By increasing the development of such power, Norway hopes to free itself from the burden of importing coal, of which it has almost none. The principal river is the Glommen, rising near Trondheim, and flowing 400 miles south into Oslo Fjord.

The Gulf Stream affects the climate mildly. Summer temperatures range from about 50 degrees in the extreme north to 60.6 degrees at Oslo. Winter in Oslo runs an average of 24 degrees, against 10 degrees in the north. Norway is one of the lands of the midnight sun; in the extreme north for many weeks in the summer the sun never sets and in the same places for an equal time in the winter the sun does not rise. Rainfall is very heavy on the coast but decreases sharply inland.

Mineral resources are extensive, but coal deposits are entirely lacking except in Spitsbergen. The most important minerals (1938, in tons) were aluminum, 32,005; iron ore, 1,625,317; nickel ore, 37,721; pyrite ore, 1,132,917; zinc, 51,285; and copper ore, 38,696. Others were molybdenum ore, tungsten, tin and silver. Cheap electrical power makes possible the extraction of nitrogen from the air and the manufacture of potassium nitrate which competes as a fertilizer with the natural nitrate mined in Chile.

The forests are one of the chief natural resources. About 25 percent of the total area is covered with forests of which 70 percent is pine. The forest areas are largely in the south and southeast. Timber production in 1939 was 138,448,024 cubic feet and production of all forest products amounted to 229,323,557 cubic feet. Most of the timber produced is consumed in the paper and the pulp industry and only a small proportion is exported as timber.

Fishing is one of the principal industries, engaging as many as 100,000 persons annually. A large number of the best European food fisheries occur along the coast. Norwegians are also the world's leading whalers and took the lead in the development of pelagic (open sea) whaling, having 13 floating whale factories in 1939. Six were lost during World War II, but one has since been built, and one was obtained from the German merchant fleet.

MAJOR SEA PRODUCTS, 1938

Product	Amount	U. S. dollars
Codfish		
(dressed)	40,471 tons	882,411
Cod		
(dressed)	240,411 tons	8,757,533
Herring	763,119 tons	6,842,614
Sprat	16,380 tons	850,475
Whale oil	1,089,072 tons	10,956,436
Whales	13,197 number	
Others	113,216 tons	6,407,652
Total	2,262,669 tons*	\$34,699,721

*Excluding weight of whales and seals.

Outlying Territories

SPITSBERGEN (SVALBARD). This arctic archipelago with area of 25,000 sq. mi. lies about 350 miles north of Norway and consists of West Spitsbergen (15,200 sq. mi.), North-East Land (about 6,000 sq. mi.), Edge Island (2,500 sq. mi.), Barents Island (580 sq. mi.), and several small islands including Bear Island. It was probably discovered by Norwegians in 1194 A.D. and rediscovered by the Dutch navigator Barents in 1596. Despite diverse interests in and claims to the islands by numerous nations, the question of sovereignty was long unsolved. However, by a treaty signed with the nations interested on Feb. 9, 1920, Norwegian sovereignty was recognized and Norway declared the area a part of the kingdom Aug. 14, 1925. In the 18th and 19th centuries, it was a whaling center, but now the only important product is coal (1938: 691,000 tons). The population (1938-39), largely miners, numbered 2,210.

JAN MAYEN ISLAND. This arctic island (144 sq. mi.), lying between Greenland and the north of Norway, was discovered by Henry Hudson in 1607. It was annexed to Norway May 8, 1929. A Norwegian weather station was established in 1921, and during World War II a U. S. Navy weather station was maintained on the island. It is otherwise uninhabited.

OTHER TERRITORIES. Norway also exercises sovereignty over Bouvet Island (22 sq. mi.) in the South Atlantic, Peter I Island (94 sq. mi.) in the Antarctic Ocean, and that part of the Antarctic continent lying between 20 degrees west and 45 degrees east. All are uninhabited.

Outer Mongolia (Republic)

Area: 580,158 square miles.

Population (est. 1941): 850,000.

Density per square mile: 1.4.

Ruler: Marshal Choy Bal-san.

Principal city: Ulan Bator Khoto (Urga), 100,000 (capital).

Monetary unit: Tugherik.

Racial stock: Mongol except for about 100,000 Russians and 50,000 Chinese.

Language: Mongolian, Russian.

Religion: Lama-Buddhism.

Outer Mongolia, which is also known as the Mongolian People's Republic, is a Russian satellite that measures more than twice the area of Texas. It contains the original homeland of the historic Mongols whose power reached zenith in the 13th century under Kublai Khan. The area accepted Manchu rule in 1689 but after the fall of the Manchus and the Chinese Revolution of 1911, the northern Mongol princes expelled the Chinese officials and declared independence under the Living Buddha. In 1921 Soviet troops entered

the country, and facilitated the establishment of a republic by Mongolian revolutionaries in 1924 after the death of the last Living Buddha. China, meanwhile, continued to claim Outer Mongolia but was not able to back the claim with any strength. Outer Mongolia significantly signed a military alliance with Russia in 1936.

Under the Sino-Russian Treaty of 1945, China agreed to give up Outer Mongolia subject to a plebiscite. The subsequent vote was announced as 483,291 to 0, in favor of independence. On Jan. 5, 1946, China recognized Outer Mongolia's independence.

The government of the republic is modeled somewhat on the Russian pattern. The Great Huraldan (parliament) is elected by universal suffrage, meets once a year, and picks thirty members to act as an executive committee—the Little Huraldan, which in turn selects five members to administer the country. The only political party is the Mongol People's Revolutionary Party, formed in 1921 around a nucleus of young Soviet-trained Mongols. The army of several thousand is Russian-trained and equipped.

Outer Mongolia is under strong Soviet influence both politically and economically and a number of young Mongols are regularly sent to the U. S. S. R. for technical training. The capital, Ulan Bator Khoto, the former holy city of the Mongols, has a radio station, several newspapers published in Mongolian, high schools, a university, medical schools, and a military school with Soviet advisers. The present government has followed a policy of suppressing the tribal leaders and the lamas. The latter formerly comprised a considerable portion of the population.

The country is largely pastoral. There are few areas suitable for crop growing. Some millet, rye and wheat are produced. Most of the people are essentially nomadic or seminomadic and while some local development has taken place in the towns, flocks and herds remain the chief source of wealth. In 1942 there were 1,340,000 horses, 270,000 camels, 1,500,000 oxen, and 10,600,000 sheep. There are a few industrial enterprises including a machinery factory with an output valued at \$600,000 in 1938, a brick factory, and an electric power station all located at Ulan Bator Khoto. Foreign trade, a state monopoly, is carried on entirely with the Soviet Union. The only available trade statistics (1936) indicated exports valued at \$5,892,000 and imports valued at \$9,251,000. Leading exports are livestock, wool, hides, and animal hair, meat and furs. Principal imports are flour, cotton cloth, tea, petroleum, tobacco and clothing. Although the old caravan routes are still used and transpor-

tation is mainly by horse, camel or ox carts, a number of motorable roads exist (2,477 miles in 1938) including a highway from Ulan Bator Khoto to the Siberian border town of Kyakhta. An airline also functions between Ulan Bator Khoto and Ulan Ude in the Buryat Mongolian Autonomous S. S. R. which borders Mongolia on the north. No railways are known to exist but a line is projected between Ulan Bator Khoto and Kyakhta. Steamer transportation is available on the Orkhon and Selenga Rivers.

The productive regions of Outer Mongolia—a table land ranging from 3,000 to 5,000 feet of elevation—are in the north which is well drained by numerous rivers. The climate is continental, with hot summers and cold winters. Rainfall is light throughout the country, and almost negligible in the Gobi in the southeast.

Reserves of 500,000,000 tons of coal are said to exist in the Nalaikh field near Ulan Bator Khoto. Production in 1938 was 71,615 tons. Some gold is mined. Deposits of antimony, copper, iron ore, lead, graphite, mercury and silver also exist.

Panama (Republic)

(República de Panamá)

Area: 28,468 square miles.

Population (1940): 631,637.

Density per square mile: 22.1.

President: Enrique A. Jiménez (provisional).

Principal cities (1940): Panamá City, 111,893 (capital and chief port); Colón, 44,393 (chief Caribbean port); Ciudad David, 9,222 (bananas).

Monetary unit: Balboa.

Racial stock (1940): Mestizo, 65.34%; Negro, 13.31%; White, 11.07%; Indian, 9.53%.

Language: Spanish (official).

Religion: Roman Catholic, 93%; Protestant, 6%; Others, 1%.

Visited by Columbus in 1502 on his fourth voyage and explored by Balboa in 1513, Panama was in colonial days, the principal trans-shipment point for Spanish treasure and supplies to and from South and Central America. In 1821, when Central America revolted against Spain, Panama joined Colombia which already was independent. For the next eighty-two years, Panama kept trying to break away but Colombia held on. After U. S. proposals for canal rights over the narrow isthmus were rejected by the Colombia Senate, Panama proclaimed independence with U. S. backing. U. S. forces restrained Colombian intervention on the ground that the U. S.-Colombian treaty of 1846 gave the United States the right to keep the isthmus open.

For canal rights in perpetuity, the United States paid Panama \$10,000,000, and agreed

to pay \$250,000 (later \$430,000) each year. In exchange, the United States got the Canal Zone, a ten-mile-wide strip across the isthmus, and a considerable degree of influence in Panamanian affairs. Since 1903, Panama's government generally has been stable, with orderly presidential succession. Arnulfo Arias, a pro-Axis president, was ousted and exiled in 1941, and succeeded by Dr. Adolfo de la Guardia. Enrique A. Jiménez was elected provisional president by the National Assembly in 1945.

The National Assembly elected in May of 1945 was empowered to write a new constitution. It would replace the constitution suspended in 1941, under which the 32-member Assembly and the president were elected for six-year terms, with the president ineligible to succeed himself. The five judges of the Supreme Court were appointed by the president for ten years. Panama is divided into seven provinces. It has no army or navy, but a national police corps numbering about 2,000 men.

Although education is free and compulsory between seven and fifteen, illiteracy is very high in Panama. In 1942 there were 670 primary schools, enrollment 74,039; twenty-nine intermediate schools, enrollment 8,407; and a national university in Panama City with 857 students.

About five-eighths of Panama is unoccupied. A fourth of the population is in Colón and Panamá City, the oldest white settlement on the Pacific coast of the Americas. In the cities, the lower classes are Negro and Negroid, descendants of British West Indian laborers on the canal. Once literally a pest hole from coast to coast, Panama has been made into one of the healthiest of the tropics through U. S. sanitation methods introduced by Canal Zone officials.

Bananas are the main agricultural crop, and then cacao, tobacco, abaca, rubber, rice, coffee and sugar cane, all of which are exported as well as cattle, hides, gold and mother of pearl. Exports in 1943 totaled \$1,971,085 against imports of \$40,267,592. The Panama Canal is the country's biggest economic asset. Nearly 40 percent of the 1945 national income of \$129,126,000 was derived from the wages of Panamanians working in the Canal Zone, or from cash spent by the U. S. civilian and military personnel in the Zone.

Textiles and food make up about 50 percent of imports and machinery, about 20 percent. The United States normally supplies over half the imports, buys 90 percent of the exports.

The main railway is the U. S. Government-owned Panama Railway, forty-eight miles long, bridging the isthmus from Panamá City to Colón. All rail mileage in 1942 totaled 396; and highway mileage,

about 750 miles. The canal attracts to Panama the biggest shipping tonnage in Latin America, and shipping under Panamanian registry increased in World War II to 362 vessels of 1,342,072 gross tons.

Panama revenues for 1943-44 were \$54,-836,215 against expenses of \$47,756,506. The 1943 public debt was \$20,448,390.

Panama runs east to west for 420 miles from Costa Rica to Colombia, varies in width from 31 to 118 miles, with 477 miles of Caribbean coast and 767 on the Pacific. At the narrowest and lowest point, the canal bisects the country. Outlying islands number 630 in the Caribbean and 116 in the Pacific. Panama steps up from coastal lowlands, with extremely heavy rainfall, to upland valleys to plateaus covered by dense forest and a few mountain peaks, some of them volcanic, near the Costa Rican border. Its many rivers are not navigable, and its overall climate is distinctly tropical.

Minerals include gold, oil, copper and platinum toward the Colombian border, but transit shortcomings have hampered development. Forest resources include mahogany, copaiba, sarsaparilla and ipecacuanha. Pearl fishing is a minor industry, supplying coral, mother of pearl, pearls and tortoise shell.

Paraguay (Republic)

(República del Paraguay)

Area: 154,165 square miles.

Population (est. 1945): 1,108,040.

Density per square mile: 7.19.

President: Gen. Higinio Morínigo.

Principal cities (est. 1943): Asunción, 126,280 (capital); Villarrica, 30,176 (sugar, tobacco); Concepción, 16,007 (port, Paraguay R.); Encarnación, 15,610 (RR terminus).

Monetary unit: Guaraní.

Racial stock: Paraguayan, 97%; Indian, 3%.

Languages: Spanish (official); Guaraní.

Religion: Roman Catholic.

Paraguay, a landlocked country of cattle raising and lumbering, with a good river outlet to the South Atlantic, is three times the size of Georgia and, more often than not, is under the thumb of a dictator-president. In 1526 and again in 1529, Sebastian Cabot, the English explorer, looked over the area when he sailed up the Paraná and Paraguay Rivers. Domingo Martínez de Irala, a Spaniard, founded Asunción in 1537. From 1608 until their expulsion from the Spanish dominions in 1767, the Jesuits maintained an extensive establishment in the south and east of Paraguay. In 1811 Paraguay revolted from Spain and became a nominal republic under two consuls, one of whom, Dr. José Rodríguez Francia, ruled as absolute dictator until his death in

1840. His dictator successor, Carlos Antonio López, was succeeded in 1862 by his son, Francisco Solano López, under whose leadership Paraguay lost a good part of its population in a disastrous war with Argentina, Brazil and Uruguay. In the succeeding decades, Paraguay stumbled along toward economic progress, handicapped by revolution, intrigue and corrupt government. It remained neutral in World War I. Economic and financial exhaustion marked war with Bolivia, 1932-35, after which Paraguay was awarded three-fourths of the disputed Gran Chaco region in 1938.

General José Félix Estigarribia, elected president constitutionally in 1939, was killed a year later in a plane crash. General Higinio Morínigo, elected president by the Council of Ministers in 1940, was the only candidate in the 1943 election in which he won the term ending in 1948. Soon after, Morínigo seized dictatorial powers. In June, 1946 Morínigo used force to smash an attempted revolution and in July the pressure of the opposition forced him to restore the rights of political parties which had been outlawed for six years. At the same time he reorganized his cabinet to give it broader political representation, but despite these gestures, Morínigo's regime appeared far from steady.

Since the adoption of the 1940 constitution, Paraguay has been an authoritarian republic which elects every five years a president by popular vote and a one-house Congress, on a population basis. There also is a Council of State whose members are named by the government. The presidentially-appointed cabinet administers the government, and is required merely to inform the Congress and Council of its policy. For administration, Paraguay divides into a west section of three military regions, an east section of twelve departments. The army numbers more than 8,000. Military service in wartime is compulsory for two years. For patrolling the Paraguay River, the country's life line, there is a navy of 1,500 men with four gunboats. The army and air force are receiving instruction from a U. S. military mission. The budget share allotted to defense has been estimated at 39 to 53 percent.

Illiteracy is unofficially estimated at 60 percent, the fourth highest rate in South America. Education is free and supposedly compulsory. In 1945 there were 60,000 pupils attending 2,000 elementary schools. The University of Paraguay, founded in 1888, had 1,200 students, and there were several normal and agricultural schools. Roman Catholicism is the official religion but religious freedom is permitted.

Racially the Paraguayans are a homogeneous blend of Spanish, Portuguese and Italian with considerable Guaraní Indian blood. There are almost no Negroes but

35,000 to 50,000 wild Indians, mainly in the Chaco. The country is fully 90 percent bilingual with Guaraní dominating over Spanish (the official language) in the rural areas. Immigration, though small-scale, has increased recently; most of the immigrants, Mennonites and some Czech, Russian and German groups live in small colonies.

A well-favored land, Paraguay is predominately a cattle country, keeping about 4,000,000 head. Also, the soil is fertile and the climate suitable for subtropical crops. The chief export is cotton (acreage 750,000; est. 1945 output, 29,762 short tons); the staple food crop is mandioca. Other crops are rice, maize, yerba maté, tobacco, sugar, peanuts and fruits. Oil of petit-grain, an important perfume ingredient, is extracted from the leaves of the bitter orange. Aside from the production of canned meat and quebracho extract, constituting in 1943 38 percent of an industrial output of \$56,000,000, the manufactures of the country are slightly developed, but are showing steady growth.

Exports in 1944 were valued at \$13,700,000, and imports, \$12,957,000. The leading exports were canned beef 23 percent; quebracho extract 13 percent; raw cotton 12 percent; salt hides 11 percent; logs, vegetable oils, petit-grain, and yerba maté; imports were textiles, foodstuffs, manufactures of metals, vehicles and boats, minerals and fuels, machinery, paints, soaps and chemicals. Britain, the United States, and Argentina shared the exports, while Argentina was the chief supplier of imports, followed by the United States and Brazil.

River traffic, the principal means of communication, is largely monopolized by a British-controlled Argentine company; plans were announced in June, 1946, for the formation of a Paraguayan-owned river fleet. The Paraguay River is navigable for vessels of 12 ft. draft to Asunción, principal shipping point, and Concepción; and for smaller vessels for its entire length. The Alto Paraná is navigable for larger vessels for almost its whole length. Railway mileage in 1944 was 1,044; the chief line, British-owned, runs from Asunción to Encarnación, with connections to Buenos Aires. Highways, generally poor, totaled 3,760 miles in 1944. External air service is furnished by Pan American and an Argentine company; domestic service, by the nationalized Línea Aérea de Transporte Nacional (LATN).

The budget in 1944 totaled 20,564,300 guaraníes. The external debt in 1941 was 15,272,422 gold pesos (1 gold peso = 1.75 guaraníes); the internal debt, 24,001,134 gold pesos. American direct investments in 1940 were \$5,037,000; British investments in 1944, £2,842,150.

Eastern Paraguay, between the Paraná and Paraguay Rivers, is upland country with the thickest population settled on the grassy slope that inclines toward the Paraguay. The greater part of the Chaco region, to the west, is covered with marshes, lagoons, dense tropical forest and jungle. In the east, the temperature averages about 81 degrees in the summer and 64 in the winter. From Asunción, with an annual average greater than 50 inches, the rainfall decreases toward the west.

Paraguay's mineral deposits are small, except for manganese in the near-inaccessible northeast. In the western Chaco, a U. S. oil company has been exploring for oil. Forest resources are considerable, especially in the Chaco. Quebracho—the "axe-breaker"—a wood so heavy that it will not float—is the principal commercial tree. The wood is used for many things, from paving blocks to ox-cart wheels. Quebracho extract, 49,079 metric tons in 1942, is the chief product. Exports are limited by agreement with Argentina, also a heavy producer. Other important woods are cedar, curapay, lapacho, and urendey. Dyewoods and fibers are produced.

Peru (Republic)

(República del Perú)

Area: 482,133 square miles.

Population (est. 1943): 7,395,687.

Density per square mile: 15.3.

President: José Luis Bustamante y Rivero.

Principal cities (census 1940): Lima, 533,645 (capital); Callao, 84,438 (port of Lima); Arequipa, 79,185 (commercial center); Cusco, 45,158 (ancient Incan capital); Trujillo, 38,961 (mining).

Monetary unit: Sol.

Racial stock: White and Mestizo, 52.9%; Indian, 45.9%; Asiatic, .06%; Negro, .04%.

Languages: Spanish, Quéchua, Aymará (Indian).

Religion: Roman Catholic.

Peru, once part of the great Incan empire and later the major viceroyalty of Spanish South America, emerged from twenty years of dictatorship on July 28, 1945, with the inauguration of President José Luis Bustamante y Rivero after the first free election in many years. However, the change to a regime in which political prisoners were freed and the press was free to criticize, was soon tempered a bit by factional troubles within the government.

Today a nation more than three times the size of California, Peru was conquered in 1531-34 by Francisco Pizarro. On July 28, 1821, Peru declared independence but the Spanish were not finally defeated until the Battle of Ayacucho on Dec. 9, 1824. For a hundred years the course was rough.

Revolutions were frequent and a new war was fought with Spain in 1864-66. The dispute with Chile over Tacna and Arica was not finally settled until 1929, and war with Colombia over the Leticia Corridor was narrowly averted in 1931. Major economic development, mostly by foreign capital, began late in the last century. In World Wars I and II, Peru enjoyed cotton and copper booms. After political unrest, General Oscar Benavides became president in 1933 and vigorously set about suppressing popular rights and representative government. He was succeeded in 1939 by President Manuel Prado y Ugarteche.

Under the 1933 constitution, Peru elects by popular vote every six years a president, two vice-presidents and a bicameral congress—a Senate of 54 members and a Chamber of 156 members. The president is ineligible to succeed himself. The cabinet of nine ministers is presidentially appointed, while Supreme Court judges are elected by the congress from a presidential list. The central government names the executives of the twenty-one departments and two provinces.

Military service is compulsory at the age of eighteen. A U. S. military mission advises the armed forces, built around an army that has been strengthened and improved over its 1940 size of 14,551 men with 470 reserves. The air force, with 1,935 men and ninety planes in 1940, received fifty U. S. lend-lease craft in 1940. The 1945 navy had two old cruisers, two destroyers, four submarines, six river gunboats and smaller units. There are about 10,000 police and civil guards.

Peru, once the cultural center of Spanish South America, had a 1944 illiteracy rate of 58 percent. Education between seven and fourteen is free, compulsory and state-controlled. Primary schools numbered 8,059 in 1942 and enrolled 688,377, while seventy-four intermediate schools enrolled 99,325. Five universities had 5,033 attendance. The government directly controls all institutions of higher learning, including the University of San Marcos in Lima, the oldest in the Western Hemisphere, founded in 1551.

The Roman Catholic church is protected by the government and only its religious instruction is permitted in the schools. Juan Gualberto Guevara, Archbishop of Lima, became Peru's first cardinal at the last Papal consistory.

Most Peruvians are of mixed Spanish and Indian blood. The Indians come from three main stocks—Quechua, Colla and Chuncho. In 1939 Peru counted 63,805 foreigners, including 22,738 alien Japanese and 16,356 Chinese.

Compulsory social security, established in 1936, covers illness, maternity, dis-

ability, old age and death; benefits are steadily being extended.

Land under cultivation is estimated at about 3,617,000 acres or 12% of the total area, with over 80% of the population dependent upon agriculture. About $\frac{1}{4}$ of the cultivated area in the irrigated coastal valleys of the central region, is devoted to cotton, the most important crop (1944 production: 66,700 metric tons). Sugar, rice, tobacco and coffee are exported, while wheat, corn, potatoes, beans, barley and quinoa are subsistence crops. Stockraising, pursued in the Pacific highlands and the elevated parts of the Pacific slope, supplies most of the country's meat needs, as well as wool, hides, and skins for export. Llamas, used as beasts of burden, and vicuñas and alpacas, noted for their wool, are native to Peru. Livestock in 1945 was estimated at 13,750,000 sheep, 2,500,000 cattle and 490,000 horses.

Peru as a whole cannot be said to be industrialized. Aside from the copper smelters and oil refineries, the greatest progress has been made in the textile industry, which obtains its raw materials from domestic cotton and wool and from imported silk.

Imports in 1944 totaled 514,423,376 soles and exports, 547,335,952 soles. The chief suppliers were the United States (53.0%), Argentina, Brazil and Chile; the chief customers, the United States (35.5%), Chile, Britain and Australia. Principal imports by value were foodstuffs, machinery and motor vehicles, iron and steel products and chemicals and drugs; the chief exports, sugar, petroleum, copper and cotton.

Highway mileage in 1945 totaled 18,480 miles of which 7,260 were hard-surfaced; the Pan-American highway had a total Peruvian length of 1,818 mi. Railway mileage was 2,764, much of it over difficult territory. Panagra, Cia. de Aviación Faucett and the nationalized Línea Aérea Nacional supply domestic and international air service. Callao is by far the most important port. There are over 5,400 miles of navigable tributaries of the Amazon in eastern Peru; the chief Amazon port is Iquitos, 2,653 mi. from the Atlantic. The telephone system in 1942 had 36,344 telephones; and there were 70,000 radio sets in 1941.

The 1946 budget totaled 648,703,447 soles. The public debt in June, 1944, totaled 1,303,800,000 soles. Foreign capital has played a large part in Peruvian economic development. British investments in 1944 amounted to £28,769,244; American direct investments in 1940, \$81,597,000. The government in 1945 decreed the liquidation of German banking interests and the sale of Axis expropriated property, the proceeds to be used for the repatriation of Peruvian bonds.

The Andes Mountains divide Peru into

three sharply different zones. To the west is the arid coast, a near desert for fifty to a hundred miles inland, and 1,400 miles long. The mountain area, with peaks over 20,000 feet high, lofty plateaus and deep valleys, lies centrally. Beyond the mountains to the east is the heavily forested slope leading to the Amazonian plains. The climate ranges from tropical in the eastern lowland to arctic among the snow-capped peaks.

Peru has vast mineral resources—it is third in world silver production and mines 30 percent of the world's vanadium—but still mining is second to agriculture, and nearly all of it in the hands of foreign capital. Petroleum and copper are the most important, with the latter controlled by the American-owned Cerro de Pasco Corporation, which also accounts for much of the gold and silver output.

PRINCIPAL MINERAL PRODUCTS OF PERU, 1943 AND 1944

Product	1943	1944
Petroleum (bbl)	14,600,000	14,385,900
Copper		
(metric tons)	31,830	32,700
Gold (oz)	230,000	175,000
Lead (metric tons)	49,000	52,500
Silver (oz)	15,150,000	15,830,000
Zinc (metric tons)	.....	50,800
Vanadium		
(short tons)	942	568

Forest products include rubber (1943 exports—969 metric tons) and balata, raw quinine (1945 exports, all U. S.-bought—849,160 kilograms); also vegetable ivory, mahogany, cedar, dye woods and coco, the source of cocaine. An important industry on the outlying islands is the gathering of guano (bird excrement), a valuable fertilizer used almost entirely domestically.

The Philippines (Republic)

Area: 114,400 square miles.

Population (est. 1940): 16,356,000.

Density per square mile: 142.9.

President: Manuel A. Roxas.

Principal cities (census 1939): Manila, 623,492 (capital, chief port); Cebu, 146,817 (seaport); Zamboanga, 131,455 (seaport); Davao, 95,546 (seaport); Iloilo, 90,480 (seaport); Ormoc, 77,349 (seaport).

Monetary unit: Peso.

Racial stock (by nationality, 1939): Filipino except for 117,461 Chinese, 29,262 Japanese, 8,739 Americans and 11,515 others.

Languages: Tagalog, English, Bisayan, Spanish.

Religions (census 1939): Roman Catholic, 78.7%; Aglipayan (Independent Philippine Catholic), 9.8%; Mohammedan, 4.2%; Protestant, 2.3%; Others, 5%.

Fernando Magellan, the Portuguese navigator in the service of Spain, discovered the Philippines in 1521 and 21 years later a Spanish exploration party named the group of islands the "Philippines" in honor of Prince Philip, later Philip II of Spain. Spain retained possession of the islands for the next 350 years, although the Moros in the southern islands continued to harass the Spanish troops until 1850. The Philippines were ceded to the United States by the Treaty of Paris ending the Spanish-American War, but the Filipinos led by Emilio Aguinaldo declared their independence (Sept. 29, 1898) and continued guerrilla warfare against U. S. troops until the capture of Aguinaldo in March, 1901. By July, 1902, peace was established in all parts of the islands except those inhabited by Moro tribes. The first civilian governor-general was William Howard Taft (1901-04). The Jones Law (1916) provided for the establishment of a Philippine legislature composed of an elective Senate and House of Representatives. The Tydings-McDuffie Act, signed March 24, 1934, and ratified by the Philippine legislature on May 1, provided for complete Philippine independence in 1946. Under a constitution approved by the people of the Philippines May 14, 1935, the Commonwealth of the Philippines was inaugurated Nov. 15, 1935, under the presidency of Manuel Quezon, who was re-elected in 1941.

The Philippines were invaded by the Japanese troops Dec. 8, 1941, and after the fall of Bataan and Corregidor, President Quezon and his government fled to Washington. The Japanese-sponsored "Philippine Republic" received little sympathy from most Filipinos. U. S. forces led by Gen. Douglas MacArthur re-invaded the islands in October, 1944, and after the liberation of Manila (Feb. 1945), Sergio Osmeña, who had succeeded to the presidency on the death of Quezon (Aug. 1, 1944), re-established his government in the Philippines.

Brig. Gen. Manuel A. Roxas became president, defeating Osmeña in the elections of April, 1946, and was first head of the new independent republic which came into existence on July 4, 1946.

Under the Constitution of 1935 (as amended in 1939), the Philippines has a republican form of government based on that of the United States. Executive power is exercised by the president, popularly elected for a 4-year term, who is assisted by a cabinet appointed by him. The popularly elected Congress has two houses—the Senate with 24 members and the House of Representatives with 120 members. The judiciary consists of the Supreme Court (7 justices), the Court of Appeals (15 justices), courts of first instance, municipal courts and justices of the peace. Of

the 48 provinces, 39 are regularly constituted with elective governors. Five governors of the nine specially organized provinces are elected and the other four are appointed.

In March, 1940, there were 12,057 public schools with a primary enrollment of 1,572,639; intermediate, 277,574; secondary, 90,579; collegiate, 3,777; total 1,944,569. The 439 private schools had a total enrollment of 149,491. The University of the Philippines was authorized by an act of the Philippine legislature (1908). Private non-sectarian institutions include the University of Manila, National University and the Far Eastern College. Of the 8,466,493 persons reported as engaged in gainful occupations in 1939, 3,912,580 were listed as literate and 4,546,496 as illiterate; 7,417 were unreported. Fewer than half of the children of school age attended school in 1940.

Agriculture is the chief industry. The last census (1939) showed 1,634,726 farms with a total area of 16,531,716 acres (about 22 percent of total area), of which 9,769,669 acres were under cultivation. The average size of the farms was 10.11 acres, but there were many large plantations. Rice (palay), the staple native food cereal, occupied 43.3 percent of the cultivated area in 1938, but production is insufficient for home consumption. The Philippines normally produce about one-half of the world copra supply and a large proportion of the abaca supply; they are also a leading source of sugar and its products which form the chief export.

Other crops include sisal, kapok, cotton, coffee, rubber, cacao, citrus fruits and bananas. Livestock in 1939 included carabaos, the farmers' all-purpose animal, 2,918,730 (reduced by over 50 percent in 1946); cattle, 1,349,264; horses, 340,432; swine, 4,348,515; and goats, 402,173.

MAJOR AGRICULTURAL CROPS 1939

Crop	Acreage*	Tons
Abaca	1,254,760	158,903
Copra	1,588,210	556,023
Corn	1,736,410	522,321
Rice	4,722,640	2,012,777
Sugar	563,160	1,105,989
Tobacco	185,250	35,407

*1938 acreage.

Industry had made some progress prior to World War II, but private manufactures were still in their infancy. In addition, industrial establishments suffered serious damage as a result of the Japanese invasion and occupation. A start has been made in sugar, rope, cigar and cigarette, and furniture factories, lumber and rice mills, and modern factories producing beverages, perfumes, cosmetics and other consumer goods. Preparation of fine embroideries is

an important home industry. In 1938, 49,954,182 gallons of molasses were produced, and there were 92 cigar and cigarette factories, 70 beverage factories, three textile factories, and 2,441 food processing plants.

Exports (1939-40) were valued at \$113,412,000 of which 74.8 percent went to the U. S., 6.9 percent to Japan, 3.3 percent to the United Kingdom, and 2.1 percent to France. Imports totaled \$144,586,000, of which 74.3 percent came from the U. S., 4.6 percent from Japan, 2.5 percent from the Netherlands Indies, and 2.0 percent from China. Leading exports were: sugar, 34.8 percent (all to U. S.); copra, 11.9 percent; coconut oil, 9.1 percent; abaca (manila hemp), 11 percent; and tobacco products, 5.3 percent. Leading imports included iron and steel manufactures, 16.3 percent; cotton goods, 14.2 percent; mineral oils, 7.7 percent; tobacco products, 6.5 percent; and automobiles and parts, 5.4 percent.

The 1946-47 budget for the new republic as estimated by President Roxas, called for expenditures of \$135,000,000, with revenues amounting to only \$20,000,000.

Transportation facilities suffered especially severe damage during World War II. The interisland trade—extremely important because of the makeup of the archipelago—was served in 1937 by 2,907 vessels licensed for domestic trade, 1,545 for coastwise trade and 1,362 for bay and river traffic; only a few vessels were in operation in 1946. The port of Manila has ample facilities for ocean-going vessels. Railway mileage (1939) totaled 844, most of which was on Luzon. Highways totaled 10,920 miles, of which 6,127 were improved.

The Philippines are an archipelago of approximately 7,083 islands lying about 600 miles off the SE coast of Asia and bounded on the west and north by the China Sea, east by the Pacific, and south by the Celebes Sea. They extend north and south about 1,150 miles and east and west about 688 miles. The northernmost island, Luzon, is 65 miles from Formosa, while the southernmost is 30 miles east of Borneo. Only 466 of the islands have an area of over one square mile and only 2,441 have names. The largest islands are Luzon in the north (40,814 square miles), Mindanao in the south (36,906 square miles), Samar (5,124 square miles), Negros (4,903 square miles), and Palawan (4,500 square miles). The islands are the tops of an irregular submerged mountain chain which is largely of volcanic origin. The plains lying among the mountains are the most densely populated portions of the islands except in Cebu, where the people live mostly on the coastal plain. Extensive drainage systems are provided by the numerous short rivers including the Pasig in Luzon, also important commercially, and the Rio Grande and Agusan in Mindanao. There are also several large lakes.

The climate is warm throughout the year with only slight variations. During the season of the northeast trade winds (Nov.-June), the eastern coasts have a heavy rainfall, but the western coasts and interior remain dry. The rainy season begins in July and continues through October, when the southwest monsoon prevails. Occasional earth tremors and seasonal typhoons often cause severe damage.

The Philippines possess large but relatively undeveloped mineral resources. Most important is gold, production of which rose from 160,620 ounces in 1929 to 999,408 ounces valued at \$34,979,280 in 1939. Most of the mines in production were lode mines. Also important are: silver (1939: 1,247,541 ounces), iron ore (1,272,868 tons), copper ore (5,732 tons), chromite, manganese ore, lead and zinc. Petroleum formations are also known to exist.

The forest area is estimated at more than 43,700,000 acres (about 58 percent of the total area), not including 3,200,000 acres covered with cogón grass, fit for grazing. About 97.5 percent of the total forest area is government-owned. The volume of standing commercial hardwoods and softwoods was estimated at 464,740,000,000 board feet in 1941. In 1938, 2,393,510 cu.m. of lumber were cut; there were 141 sawmills and seven machine logging outfits with Americans holding the largest investments. Minor forest products include charcoal, tanbarks, cutch, dye barks, manilla copal and elemi, oleoresins, rattan, diliman and kamagsa.

Of the approximately 1,900 different species of fish, only about 100 kinds are marketed, although a majority are edible. The most common are milkfish, mackerel, snappers, sea bass, porgies, pompanos, millets, anchovies, barracudas, tunas, bonitos and eels. Fish exports are chiefly canned tunas. Other marine products include coral, pearls, shells and sponges.

Poland (Republic)

(Rzeczpospolita Polska)

Area (est. 1945): 120,782 square miles.

Population (est. 1946): 23,622,334.

Density per square mile: 195.3.

President: Boleslaw Bierut (provisional).

Premier: Edward Osóbka-Morawski.

Principal cities (est. 1946): Łódź, 496,000 (industrial center); Warsaw, 476,000 (capital); Kraków, 300,000 (trading center); Gdansk (Danzig), 118,000 (seaport).

Monetary unit: Złoty.

Racial stock: Polish, German.

Languages: See Racial stock.

Religions: Roman Catholic, Jewish, Protestant.

HISTORY. Poland was very early a Christian country. Early in the 11th century the

Polish king, Boleslaus the Brave, ruled over Bohemia, Saxony and Moravia. His kingdom fell before the Tatars who were driven back by two orders of German knights—the Knights of the Sword and the Teutonic Knights—who spread Christianity along the shore of the Baltic. They created a state which included the district of Kulm and part of Poland, subject to the Holy Roman Empire. In 1259 Poland was invaded again by the Mongols, but the country recovered under King Wladislaus I (1306-1333) who defeated the Teutonic Knights. Poland reached its greatest height in the middle of the 15th century. The decline began at the end of the century when the nobles usurped the power of the people and soon reduced the country to anarchy. In 1573 Henry of Valois, duke of Anjou, was elected king by the nobles but he reigned for only 13 months. For 100 years the nobles fought among themselves and occasionally against Turks, Cossacks and Tatars. In 1683 John Sobieski defeated the Turks before Vienna.

By the middle of the 18th century Poland was completely decadent and utterly disorganized. The first partition of the country was carried out in 1772 by Prussia, Russia and Austria; the second in 1793 and a third in 1795. For over 100 years the Poles had no nation of their own and, when World War I broke out, Poles were fighting on both sides. By the end of 1915 all of Poland had been occupied by Austro-German forces and on Nov. 5, 1916 the German and Austrian Emperors proclaimed Poland's independence but did not define its boundaries. The independence of Poland was formally proclaimed Nov. 9, 1918. On Nov. 10, 1918 Marshal Josef Pilsudski returned to Poland and was confirmed in office as President. Ignace Paderewski became the first premier in 1919. Poland's independence was recognized by the Treaty of Versailles, June 28, 1919. Russia attacked Poland in 1920 but the Poles, under Marshal Pilsudski aided by the French, succeeded in defeating them. A Franco-Polish treaty was concluded in Paris on Feb. 19, 1921. On May 12, 1926 Marshal Pilsudski seized power in a coup d'état and ruled the country through his office as premier until his death on May 12, 1935, when he was succeeded by Marshal Smigly-Rydz.

A 10-year non-aggression pact had been signed with Germany Jan. 26, 1934 but on Sept. 1, 1939, Hitler, alleging Polish mistreatment of Germans in Poland, attacked the country. Russian troops invaded from the east Sept. 17, 1939 and on Sept. 28 a German-Russian treaty was signed dividing Poland between Russia and Germany. Before leaving Poland, President Moscicki resigned, designating as his successor W. Raczekiewicz; the latter formed a government-in-exile in France with Gen.

Sikorski as premier. All of Poland was occupied by Germany after the latter's attack on the Soviet Union in June 1941. On July 30, 1941 Poland concluded an agreement with the U. S. S. R. declaring null and void the German-Soviet agreements effected after Sept. 1, 1939. On Aug. 14, 1941 a Polish-Soviet military agreement was concluded, providing for the formation of a Polish army in Russia, and on Dec. 4, 1941, a Polish-Soviet declaration of friendship and mutual assistance was signed.

In July 1944 a Communist-dominated Polish Committee for National Liberation received Soviet recognition. Moving to Lublin after the latter's liberation, it proclaimed itself the Provisional Government of Poland on December 31, 1944. After almost six months' negotiations, some of the former members of the Polish Government in London and the Lublin Government were united to form the Polish Government of National Unity on June 28, 1945. On July 5, 1945 the British and U. S. governments recognized this government and withdrew recognition from the London government. A treaty of friendship, mutual assistance and postwar collaboration was signed between the Lublin Government and the Soviet Union on April 21, 1945.

GOVERNMENT. The National Council of the Homeland (*Rada Narodowa*), an irregular body of 100 members created in Poland during World War II, acts as Poland's legislative body pending the holding of general elections. Its chairman carries on the functions of President of Poland until that time. The Council has accepted the principles of the Constitution of Mar. 17, 1921, but in a plebiscite held June 30, 1946, the Polish people voted to abolish the Senate, or upper house of Parliament, provided for in the Constitution. The functions of the National Council are limited for the most part to the approval of legislation drafted by the Council of Ministers (Cabinet) who exercise the executive power.

On Aug. 2, 1945, in Berlin, Prime Minister Attlee, President Truman and Generalissimo Stalin published a statement establishing a new *de facto* western frontier for Poland along the rivers Oder and Lausitzer Neisse, pending the signing of the final peace treaty. On August 16 the Soviet Union and Poland signed a treaty on the delimitation of the Soviet-Polish frontier under which the U. S. S. R. ceded to Poland two small areas east of the so-called Curzon Line, one about 50 miles northeast of Lwów and one in the Bialowieza forest. Under these agreements Poland was shifted westward. In the east it lost 69,860 square miles with 10,772,000 inhabitants; in the west it stood to gain 38,986 square miles with a prewar population of 8,621,000. The former German territories have been organ-

ized into the following voivodships (provinces)—Mazuria, capital: Olsztyn (Allenstein); Upper Silesia, capital: Opole (Oppeln); Lower Silesia, capital: Wrocław (Breslau); Danzig (Gdansk); and Western Pomerania, capital: Pila.

SOCIAL AND ECONOMIC CONDITIONS. Definitive statistics on postwar education are not available. Education prior to World War II was free, and elementary education compulsory. In 1938-39 there were 28,881 elementary schools with 4,953,000 pupils, 789 secondary schools with 234,200 pupils, 74 teachers' colleges with 6,600 pupils, 764 professional schools with 106,415 pupils. Universities in postwar Poland include the Jagiellon University in Kraków (founded 1364), the Pilsudski University in Warsaw (1817), and the University of Poznań (1919).

Poland remains essentially an agricultural country; the areas under *de facto* Polish administration in the west accounted for 25 percent of Germany's prewar food production. Farming conditions continued to be disturbed in 1946, with the peasants living on a subsistence basis and the greatly reduced city populations near the lower margin of existence. Accurate agricultural statistics were not available. Prewar Poland's chief agricultural products, with 1938 yield, included: rye, 7,995,423 tons; oats, 2,928,260 tons; wheat, 2,394,085 tons; barley, 1,511,584 tons; potatoes, 38,093,504 tons; and sugar beets, 3,485,914 tons. Other crops included corn, flax, hemp, millet, peas, and rape and rape seed. Livestock (1939) included 10,600,000 cattle, 3,900,000 horses, 3,200,000 sheep, and 7,700,000 swine.

Poland's industrial facilities, although severely damaged during World War II, were not greatly affected by territorial concessions to the U. S. S. R., with the exception of the Lwów area. On the other hand, important industrial areas, especially Silesia and Stettin, are located in the German territories under *de facto* Polish administration. In 1936 Poland had 22,993 larger industrial establishments with 707,113 workers. The most important by value of output were: textiles, 2,293 plants with an output of \$242,034,125; wood and paper, 3,327 with an output of \$77,236,500; metal, 1,130 with an output of \$65,703,873; and chemical, 855 with an output of \$70,271,625. Important industrial areas include Silesia and Kielce (iron and steel); Łódź, Białystok and Bielsko (textiles); Warsaw, Łódź, Bydgoszcz and Poznań (metallurgical industry). Industrial production (1938) included: pig iron, 880,000 tons; steel, 1,441,000 tons; yarn, 138,100 tons (1937) and textile fabrics, 95,300 tons (1937).

Poland's foreign trade in the immediate prewar period was marked by a weakening of the former dominance by European

countries and Germany in particular, accompanied by an expansion of trade in other parts of the world. Exports (1938) were valued at \$223,437,000 of which Germany received 24.1 percent, Britain 18.2 percent, Sweden 6 percent, and Italy 5.5 percent. Imports were valued at \$245,135,000 of which Germany supplied 23.0 percent, United States 12.2 percent, Britain 11.4 percent, and Belgium 4.1 percent. Leading exports were: coal and coke 19.1 percent (13,168,000 tons); timber, 17.1 percent; metals and metal goods, 10.8 percent; and bacon, 4.0 percent. Imports included machinery 14.8 percent, metals and metal goods 14.1 percent, cotton 9.0 percent and wool 7.4 percent. Postwar Poland is firmly within the Soviet trade orbit; most of her trade agreements involve the exchange of coal for manufactured goods and foodstuffs.

On July 1, 1939 the Polish merchant marine numbered 63 vessels with a tonnage of 121,630 gross tons. The principal ports, both severely damaged, are Gdynia, with one of the largest harbors in Europe (1938 turnover: 9,173,438 tons), and Gdansk (Danzig) (1938 turnover: 7,127,200 tons). Transportation facilities and rolling stock suffered heavy damage during World War II—a factor hampering Poland's economic recovery in 1946. Definitive railway and highway statistics for postwar Poland were not available in 1946.

NATURAL FEATURES AND RESOURCES. Most of Poland is a plain with no natural boundaries except the Carpathian Mountains on the south and the Oder and Neisse Rivers on the west. Pomerania is traversed by a range of low hills, while south of Danzig is a maze of marshes, sand dunes and muddy lakes which extend into Polish East Prussia (Mazuria). The central Polish plain, 300 to 450 feet above sea level and intersected by great rivers, lies south of the flat country along the Baltic shore. Southern Poland and Silesia is a hilly region, while on the right bank of the Vistula is the plateau of Lublin.

The basin of the Vistula River comprises what is now north central and southeastern Poland. The river, the most important in Poland, rises in the western Beskids on the Czechoslovak border, flowing in a great semicircle east and then northwest before flowing north to the Baltic. Poland's other important river is the Oder, which flows northwest through Silesia and then forms the *de facto* western boundary to the Baltic.

Poland's climate is dependent upon her proximity to the Baltic and the Carpathian Mountains. Abundant rainfall (annual average: 22.8 inches) is caused by the predominating western oceanic winds. Snow is not thick, but temperatures below zero are not uncommon, and the rivers are

generally icebound for two and a half to three months.

The acquisition of large coal deposits in German Silesia (estimated at over 5,000,000,000 tons) combined with already large reserves in the southwestern region make Poland one of the world's leading coal producers. About one-third of the 1938 output (42,002,039 tons) was exported. Iron ore deposits are located in the Kielce and Radom districts (1938 output: 961,857 tons) and in German Silesia. Zinc and lead ores are located chiefly in Upper Silesia and the voivodships of Kielce and Krakow. Lead production (1938) was 22,016 tons of zinc, 119,159 tons. Poland's principal oil producing areas, Boryslav-Drohobych, were in the territory ceded to the Soviet Union; 1946 production was not expected to exceed 120,000 metric tons as compared to 500,000 prior to World War II. Among other deposits Poland possesses copper, sulphur, chalk, clay, kaolin, marble and granite.

Forests covered 24 percent of prewar Poland, but important forest resources are located in the territory ceded to the Soviet Union. Pine trees formed 65 percent of the forests and predominate in the western and central provinces. Timber produced in 1937 totaled 190,699,758 cubic feet, and 205,000 tons of paper were produced in 1938.

The fish catch (1937) totaled 15,443 tons valued at \$970,239, of which herring accounted for over 50 percent.

Portugal (Republic)

(República Portuguesa)

Area: 35,424 square miles.

Population (est. 1944): 8,043,315

Density per square mile: 217.6.

President: Gen. António Oscar de Fragoso Carmona.

Premier: Dr. António de Oliveira Salazar.

Principal cities (census 1940): Lisbon (Lisboa), 709,179 (capital, seaport); Pôrto (Oporto), 262,309 (seaport, port wine); Funchal (in Madeira Islands), 48,493 (Madeira wine); Coimbra, 35,437 (university); Setúbal, 35,071 (seaport, sardines).

Monetary unit: Escudo.

Racial stock: Portuguese.

Language: Portuguese.

Religion: Roman Catholic.

Rolling and rugged Portugal is about the size of Indiana and, thanks to the days when its sailors and explorers were among the world's most venturesome, it has a colonial empire twenty-six times the area of the homeland. A traditional ally of Britain, Portugal remained neutral in World War II but did give the Allies the right to use vital island bases in the At-

lantic. Politically, Portugal is a virtual dictatorship, not a sinister and evil one as were Germany and Italy, but still a nation where the opposition is officially suppressed and many phases of the national life are strictly regimented.

Portugal was part of Spain until it won independence in 1143 with Alfonso I as the first king. During the reign of King John I, from 1385 to 1433, a great commercial empire was built, largely through the exploratory hobby of the king's son, Prince Henry the Navigator. Bartholomew Diaz explored Africa's west coast and reached the Cape of Good Hope in 1488. Vasco da Gama circled the Cape in 1497-99 and discovered the water route to India. Portugal's empire reached the crest in 1540 when it extended along the coast of Brazil, east and west Africa, Malabar, Ceylon, Persia, Indo-China and Malaya.

In 1580 Spain and Portugal were joined in a personal union under Philip II of Spain. Portugal revolted in 1640 and set up a new dynasty under John IV, Duke of Braganza, but the country never recovered its position as one of Europe's major powers. In 1806, when Portugal refused to obey Napoleon's orders that all continental ports be closed to British ships, Napoleon's forces invaded the country but were ousted in 1811 by British and Portuguese forces under the Duke of Wellington. The royal family had fled to Brazil in 1807 but following an uprising in 1820, the king, John VI, returned to Portugal in 1821. Brazil declared its independence in 1822 and John's son, Pedro, became emperor as Pedro I. In 1833 Pedro I who had abdicated as emperor of Brazil in 1831, returned to Europe and led an uprising with British assistance, in favor of his infant daughter Maria II, displacing his younger brother, Miguel I, who had been proclaimed king in 1828. The descendants of Maria's marriage with Ferdinand of Saxe-Coburg ruled Portugal until 1910 when King Manoel II, son of King Carlos I who was assassinated in 1908, was forced into exile by a republican revolt. On June 19, 1911 the monarchy was abolished, and a republican constitution introduced. Portugal proclaimed her loyalty to the British alliance upon the outbreak of World War I and Portuguese troops fought both in Africa and on the Western Front. There was much internal political instability during the war and, immediately thereafter and in the course of a political struggle in 1921, the premier, Dr. Antonio Granjo, was assassinated. On May 30, 1926 a revolution led by the Army deposed the President and set up a military dictatorship. General António Carmona became premier and acting president Nov. 29, 1926 and was elected president on March 25, 1928. Dr. António de Oliveira Salazar, who was appointed finance minister in 1928, founded the organization known as the National

Union in 1930 and has been premier and dictator since 1932. His regime, while admittedly opposed to liberal or democratic principles, has brought political and economic stability to Portugal. President Carmona was re-elected in 1935 and in 1942. The general election for members of the National Assembly held on Nov. 18, 1945 was boycotted by the opposition and the National Union was continued in office unopposed.

GOVERNMENT. Under the constitution of 1933 Portugal is a corporative republic. The president is popularly elected for a term of 7 years; the national assembly of 120 members, for a term of 4 years. There is also a corporative chamber which handles economic, social and some legislative matters; its 97 members are representatives of local autarchies and of the several branches of social activities—administrative, moral, cultural and economic. The assembly theoretically may overrule the president's veto by two-thirds vote. The president appoints the premier who in turn selects the cabinet which is not responsible to the national assembly.

There is a supreme court in Lisbon and courts of appeal at Lisbon, Coimbra, and Oporto; and a number of lower courts.

The republic is divided for administration into 18 continental districts and 4 island districts in the Azores and Madeira, which are integral parts of the republic.

Military service is compulsory; the initial training period is 6 years, but not all those liable for duty are called up. The military and the semi-military forces included, in 1940, the army with a strength of 30,000 actives and 126,000 reserves; the Republican Guard with a strength of about 6,000; the Fiscal Guard with a strength of about 5,000; and the overseas forces of about 12,000. A voluntary force, the Portuguese Legion, numbers over 50,000. The navy on Dec. 31, 1945, had 5 destroyers, 3 submarines, and several smaller craft. Naval personnel numbers about 6,000.

The illiteracy rate in 1940 was 49.03 per cent. Compulsory education has been in force since 1911. Elementary schools in 1943 numbered 7,714 with 522,925 students. Secondary schools numbered 42 with 15,346 students. Private elementary schools were attended by about 45,000 pupils, and private secondary schools, by about 17,000. There were three universities (Lisbon, Coimbra, Oporto).

The birth rate (1936-1938 annual average 27.4; 1943: about 24.7) is declining and the death rate is also showing a slight decline (1936-38, 16.0; 1943: about 15.2).

The economic aspect of Portugal's corporative state is a planned economy in which each producing unit regulates itself in the interest of the nation. Corporate union

have been established in agriculture, industry and finance. As an example, the government controls the wine trade by means of a federation of growers and a guild of exporters.

Sixty percent of Portugal's people are in agriculture. Although wheat is the leading crop, it is insufficient to meet domestic needs, forcing importation of grain. One of the world's leading winemakers, Portugal produces two famous kinds—Port in the vicinity of Oporto, and Madeira in the islands of the same name. In olive oil production, Portugal ranks third in the world.

AGRICULTURAL CROPS OF PORTUGAL, 1944

Barley	65,784 short tons
Beans (broad)	33,311 " "
Chickpeas	11,367 " "
Corn	443,172 " "
Oats	73,747 " "
Olive Oil	39,850 " "
Potatoes	139,312 " "
Rice	70,110 " "
Rye	103,184 " "
Wheat	405,750 " "
Wine	373,261,717 U. S. gals.

The 1940 livestock census showed 6,151,665 fowls, 3,889,875 sheep, 1,196,323 goats, 1,76,888 swine and 831,674 head of cattle. Wool production in 1943 was 6,306 tons.

Portuguese manufacturing is largely limited to making consumer goods for domestic consumption. It includes a sizable textile industry in cotton, wool, silk and linen; porcelain tiles, and the famous embroidery of Madeira.

Imports in 1944 were \$158,380,000; exports, \$127,919,000. The chief exports in 1943 were wolfram 20.9 percent; sardines 3.7 percent; wine 8.8 percent; cork 7.4 percent; resin 2.8 percent; turpentine, tin ore, and pit props. The chief imports were coal 3 percent; wheat 6.6 percent; raw cotton 6 percent; dried cod 3 percent; sugar 3 percent; hides, gasoline, ammonium sulfate, dyes and cork. The principal customers were Britain 30.4 percent; Germany 1.1 percent; United States 9.6 percent; Mozambique, Angola and Spain. The chief suppliers were Britain 15 percent; Germany 3.3 percent; United States 13.8 percent; Angola, Mozambique and Spain.

The merchant marine in 1943 had 945 vessels of 350,934 gross tons. In 1943, 5,732 vessels of 6,555,000 tons entered Portuguese ports. Railway mileage in 1945 was 2,191.

Ordinary revenue in 1945 was estimated at \$109,445,000; ordinary expenditure, \$9,326,000. The public debt on Dec. 1, 1944 was \$404,820,000. Notes in circulation May 30, 1945 amounted to \$312,971,300 and gold reserves were \$56,699,800. Portu-

guese investments in Brazil in 1938 were \$293,364,000.

NATURAL FEATURES AND RESOURCES. Portugal occupies an area about 360 miles long and 140 miles wide in the southwestern part of the Iberian peninsula. It is crossed by many small rivers, and also by three large ones which rise in Spain, flow into the Atlantic, and divide the country into three geographic divisions. The Minho River, part of the northern boundary, cuts through a mountainous area that extends south to the vicinity of the Douro River. South of the Douro the mountains slope to the plains about the Tagus River. The remaining division is the southern one of Alemtejo. The principal mountain ranges are the Serra da Estrella in the center of the country and the Serra da Monchique in the south.

The Azores, stretching over a distance of 400 miles in the Atlantic, consist of 9 islands divided into three groups, with total area of 888 square miles. The nearest continental land is Cape de Roca, Portugal, which lies 800 miles to the east. The Azores are an important station on Atlantic air routes, and both Britain and the United States established air bases there during World War II. Madeira, consisting of two inhabited islands, Madeira and Porto Santo, and two groups of uninhabited islands, lies in the Atlantic about 535 miles southwest of Lisbon. Total area of the Madeiras is 314 square miles.

The climate is equable and temperate, but in the deep valleys where the mountains keep out the cool winds from the Atlantic, it is excessively hot in summer. Heavy fogs are common along the coast. Rainfall has been as heavy as 16 feet a year. It is heaviest in the north and on the Serra da Estrella.

Mineral resources have not been fully developed but wolfram, coal, iron ore, copper, manganese, iron pyrites, lead, tin and other ores are found. The most valuable is wolfram, with 1943 output of 9,650 metric tons. Coal production in 1943 was 600,000 metric tons; manganese ore, 5,200 metric tons; and pyrites, 21,200 metric tons.

Portugal is one of the world's leading producers of cork, with a 1943 output of 76,688 metric tons. The production of resin, 28,784 metric tons in 1944, and of turpentine, 3,755 metric tons in 1943, is also important.

The fishing industry is a basic part of the national economy employing 40,000 men, and 15,000 boats in 1943. Of special importance is the sardine industry centered at Setúbal south of Lisbon. The sardine catch in 1944 was 146,521 tons valued at about \$12,551,634. Exports of tins of sardines in 1943 amounted to 37,548 tons valued at about \$30,250,000.

PORTUGUESE COLONIAL EMPIRE

	Area (sq. mi.)	Population (census 1940)
AFRICA		
Angola	487,788	3,738,010
Cape Verde Is.	1,557	181,286
Mozambique	297,731	5,081,266
Portuguese Guinea	13,948	351,089
São Tomé and Príncipe Is.	372	60,490
ASIA		
Macao	6	374,737
Portuguese India	1,537	624,177
Timor	7,332	463,996

The status of the Portuguese overseas colonies is fixed by the Colonial Act of July 1930 included in the Constitution approved by plebiscite Mar. 19, 1933. Each colony has a governor or governor general, appointed by the council of ministers for an initial 4-year term and responsible to the minister for the colonies at Lisbon. Each colony has financial and administrative autonomy.

ANGOLA. *Status:* Colony. *Capital:* Luanda (pop. 1940: 61,028). *Governor General:* Commander Vasco Lopes Alves. *Foreign trade* (1943): exports, \$23,735,000 (75 percent to Portugal); imports, \$14,203,000 (50 percent from Portugal); chief exports; maize, 88,738 tons; sugar, 45,904 tons. *Agricultural products* (1941): coffee, 29,884 tons; corn, 338,833 tons; sugar cane, 359,364 tons; beans, groundnuts, palm kernels, rice. *Minerals:* Diamonds (1944: 800,000 carats), lignite, copper. *Forest products:* Beeswax (1941: 1,377 tons), timber. *Industries:* Sugar, palm oil, whale oil, fish oil.

Angola (Portuguese West Africa) stretches along the west African coast for about 1,000 miles from the Congo to the Kunene River. Outside of a coastal plain varying in width from 30 to 100 miles, the colony is part of the great African plateau. The Angola coast and the River Congo were discovered by the Portuguese explorer Diogo Cão in 1482, and Luanda was founded in 1576. The colony's early prosperity was largely dependent on slave trade with Brazil which was not abolished until 1830. Agreements concluded with the Congo Free State, Germany and France in 1885-86 (modified in details by subsequent arrangements) fixed the limits of the province except in the southeast where the frontier was determined by the Anglo-Portuguese agreement of 1891 and the arbitration award of the King of Italy in 1905. The governor-general is assisted by a council of ten (5 officials and 5 Portuguese nationals). There are 5 provinces.

Angola is primarily an agricultural country. Its varied altitude enables it to produce both tropical and temperate crops. Excellent grazing land exists in many parts of the colony, and there are over 2,000,000

cattle. Railway mileage totals 1,442 miles and primary roads, 22,708 miles. The chief ports are Luanda and Lobito. The great majority of the population are of Bantu-Negro stock mixed in the Congo districts with the pure negro. Europeans in 1940 numbered 44,083 and half-castes, 28,305.

CAPE VERDE ISLANDS. *Status:* Colony. *Capital:* Praia. *Governor:* Commander João de Figueiredo. *Foreign trade* (1943): exports, \$1,179,000; imports \$2,376,000; chief exports: salt, 13,164 tons preserved fish, 1,000 tons. *Agricultural products:* Coffee, milled castor oil, oranges, hides.

This group of 14 volcanic islands lying off the west African coast was discovered in 1456 by the Venetian captain Cadamosto, in the service of Prince Henry the Navigator. The island of São Vicente is an important coaling station on the South American route. The vast majority of the inhabitants are mulattoes (116,910) and Negroes (57,718)—descendants of slaves brought to the islands from Africa by early settlers. Public slavery was abolished in 1854, and private slavery, in 1876. Europeans number 5,580. The principal industries, aside from agriculture, are the manufacture of sugar, spirits, salt, cotton and straw hats and fish-curing.

MOZAMBIQUE. *Status:* Colony. *Capital:* Lourenço-Marques (pop. 1936: 47,392). *Governor General:* Gen. João Tristão de Bettencourt. *Foreign trade* (1943): exports \$14,568,000; imports, \$22,356,000; chief exports, cane sugar, 59,553 tons, groundnuts 8,774 tons. *Agricultural products* (1942): sugar cane, 77,850; coconuts, 26,364; sisal, 22,901 fruit, 37,729; corn, 31,959; cotton, 1,055. *Minerals:* Gold, coal, graphite. *Forest products:* Cashew nuts, mangrove bark, ties and timbers.

Mozambique, stretching for about 1,400 mi. along Africa's southeast coast, was discovered by Vasco da Gama in 1498, although the Arabs had penetrated in the area in the 10th century A. D. It was first colonized in 1505 and by 1510 the Portuguese were masters of all the former Arab sultanates on the east African coast. The slave trade was important from the middle of the 17th until the middle of the 19th centuries. The boundaries with British Central and South Africa were delimited in 1891 and with Tanganyika Territory in 1886 and 1890. By the Treaty of Versailles, Portugal was allotted the Kionga Triangle, formerly part of German East Africa. There are no representative institutions, although there is a government Council composed of appointed officials and elected representatives of economic interests. There are four provinces each headed by a governor. One—Manica and Sofala (59,315 sq. mi.)—was held by the Mozambique Company until 1942 when the Portuguese Government refused to renew its charter.

It is probably the most advanced economically of the four.

Agriculture is the chief industry. There are many large plantations, some of which are partially mechanized. Stockraising is hampered by wide tsetse fly areas. Ninety-nine percent of the inhabitants are native Africans of the Bantu tribes. In 1940 there were 27,438 Europeans, 10,596 Asiatics (mostly British Indians) and 15,641 half-castes. In 1941 there were 1,200 miles of railway and 17,000 miles of road, mostly unimproved. The chief ports are Lourenço-Marques and Beira, which is also the port for Rhodesia. The principal river, the Zambezi, divides the colony in half.

PORTUGUESE GUINEA. *Status:* Colony. *Capital:* Bissao. *Governor:* Commander Manuel Maria Sarmiento Rodrigues. *Foreign trade* (1943): exports, \$3,899,000; imports, \$3,871,000; chief exports: groundnuts, 38,228 tons; palm kernels, 513 tons. *Agricultural products:* Groundnuts, palm kernels, rice. *Forest products:* Wax, timber.

This colony, lying on the west African coast entirely surrounded by French West Africa, was discovered in 1446 by the Portuguese Nuno Tristão and was separated from the colony of the Cape Verde Islands in 1879. It consists of a low-lying coastal region and numerous islands off the coast, among them, Bolama. The country is undeveloped economically and most of the natives are farmers. There are no railways, but navigable rivers totaling over 1,000 miles are important trade arteries. About two-fifths of the natives are Moslem; there were, in 1940, 1,419 Europeans and 2,200 half-castes, mostly creoles from the Cape Verde Islands.

SAO TOME AND PRINCIPE. *Status:* Colony. *Capital:* São Tomé. *Governor:* Capt. Carlos de Sousa Gorgulho. *Foreign trade* (1943): exports, \$1,761,000; imports, \$925,000; chief exports: cacao, coffee. *Agricultural products:* Cacao, coffee, coconuts and copra, palm oil.

These volcanic islands, lying in the Gulf of Guinea about 125 miles off the coast, were discovered by the Portuguese in 1471. Most of the early population were convicts and Jews from Portugal and slaves from Brazil and the mainland, but the bulk of the present inhabitants are Negro contract laborers from the mainland and Cape Verde engaged to work cacao plantations.

MACAO. *Status:* Colony. *Capital:* Macao. *Governor:* Commander Gabriel Mauricio Teixeira. *Foreign trade* (1939): exports, \$384,425; imports, \$3,184,288; chief exports: fish, cement, preserves. *Manufactures:* Cement, preserves, firecrackers, vegetable oils, metal products.

Macao comprises the peninsula of Macao and the two small islands of Taipa and Ilóane on the south China coast, on the east side of the entrance to the Canton

River, about 35 miles from Hong Kong. Established by the Portuguese in 1557, it is the oldest European outpost in the China trade, but Portugal's sovereign rights to the port were not recognized by China until 1887, and its boundaries are still not delimited. The port has been eclipsed in importance by Hong Kong, but it is still an important distribution center, and also has an important fishing industry employing over 40,000 people. It is notorious for its opium trade and gambling houses. Europeans number about 11,000, mostly Portuguese.

PORTUGUESE INDIA. *Status:* Colony. *Capital:* Nova Gôa. *Governor General:* Col. José Ricardo Pereira Cabral. *Foreign trade* (1940): exports, \$796,000; imports, \$4,081,000, chief exports: fish, spices, copra. *Agricultural products:* Cashew nuts, coconuts, spices. *Manufactures:* salt factories. *Minerals:* Manganese, salt.

The colony consists of Gôa and 3 islands on the Malabar coast; Damão and the territories of Dadará and Nagar-Aveli, on the Gulf of Cambial; and Diu, with the continental territories of Gocola and Simbor, on the coast of Gujerat. Gôa, captured in 1510, was the first Portuguese territorial possession in Asia and later became capital of the whole Portuguese empire in the east. The native population is largely Hindu.

TIMOR. *Status:* Colony. *Capital:* Dilly (pop. 1936: 3,000). *Governor:* Capt. Manuel de Abreu Ferreira de Carvalho. *Foreign trade* (1940): exports, \$166,000; imports, \$145,000; chief exports: coffee, sandalwood, wax, copra. *Agricultural products:* Coffee. *Forest products:* Sandalwood, wax.

Portuguese Timor consists of the eastern half of the island of Timor in the Malay archipelago, with the territory of Ambeno and two neighboring islands. It was first settled by the Portuguese early in the 16th century. In 1859 the island was divided between Portugal and the Netherlands, and boundary adjustments were effected by the convention of 1904. It became a separate colony in 1896. Fishing and copra manufacture are important; trade is mostly in the hands of Chinese, Malaysians, and Arabs. The colony was occupied by Dutch and Australian troops in Dec. 1941 and by Japanese troops in Feb. 1942, both under strong Portuguese protest.

Rumania (Kingdom)

(Rômania)

Area (est. 1945): 91,934.

Population (est. 1945): 16,500,000.

Density per square mile: 179.4.

Sovereign: King Michael I.

Premier: Petru Groza.

Principal cities (est. 1939): Bucharest, 648,162 (capital); Jassy, 104,471 (trading center,

Moldavia); Galati, 102,232 (chief Danube port); Cluj, 100,844* (Transylvanian industrial center); Timisoara, 89,872 (western commercial center).

Monetary unit: Leu.

†Racial stock (1930): Rumanian, 74.9%; Magyar, 9.4%; German, 4.3%; Turkish, 1.9%; Gypsy, 1.8%; Ruthenian, 1.7%; Bulgarian, 1.3%; Others, 4.7%.

Languages: See Racial stock.

Religions (1938): Greek Orthodox, 67.4%; Jewish, 7.5%; Greek Catholic, 7.1%; Roman Catholic, 6.1%; Reformists, 3.7%; Lutheran, 2.0%; Moslem, 1.3%; Others, 4.9%.

*Hungarian census 1939.

†Excluding Bessarabia.

In World War I, Rumania joined the Allies and won enough land at the peace conference to double its size. In World War II, Rumania joined the Axis and as a result lost about half of the earlier gains. This made its present size about that of Oregon and, politically, it was thoroughly dominated by the Russians after World War II.

Most of Rumania was the Roman province of Dacia from about 100 to 275 A. D. From the 6th to the 12th centuries, wave after wave of barbarian conquerors—Vlachs, Bulgars and others—passed over the region. Of the two regions which eventually became Rumania, Walachia was taken by the Turks in 1411, and Moldavia, in the 16th century, but both retained semi-autonomy. After the Russo-Turkish War of 1774, they went under de facto Russian protection.

The Convention of Paris nominally united the two provinces in 1858, and Alexander Cuza was elected Prince of Moldavia and Walachia. In 1866 he was forced to abdicate and was succeeded by Prince Charles I of Hohenzollern-Sigmaringen. The Treaty of Berlin recognized Rumania's complete independence in 1878, and in 1881 the principality was elevated to kingdom. Rumania's spoils from the Second Balkan War in 1913 was the Black Sea province of Dobruja. The following year King Charles was succeeded by his nephew, Ferdinand. The spoils from World War I, making Rumania then the largest Balkan state, included Bessarabia, northern Transylvania and Bukovina. The Banat, a Hungarian area, was divided with Yugoslavia.

In 1926 Crown Prince Carol renounced his rights to the throne and when King Ferdinand died on July 29, 1927, Carol's son, Michael, became king under a regency. However, Carol returned from exile in 1930, became King Carol II, and gradually became the most powerful political force in the country. On Feb. 10, 1938, he abolished the democratic constitution of 1923. On June 21, 1940, the country was reorganized along Fascist lines, and the fascist Iron Guard became the nucleus of the new totalitarian party. On June 27, Russia occupied Bessarabia and northern Buko-

vina. By the Axis-dictated Vienna award of August 30, 1940, two-fifths of Transylvania went to Hungary. On Sept. 4, the King dissolved Parliament and granted the new premier, Marshal Ion Antonescu, full power, after which he abdicated. The first step of his son, Michael, was to confirm Marshal Antonescu in his status of head of the state and premier. Rumania subsequently signed the Tripartite Pact on Nov. 23, 1940, and then joined in Germany's attack on Russia, reoccupying Bessarabia. Following the invasion of Rumania by the Red Army in August, 1941, King Michael led a coup d'état which ousted the Antonescu government. The new cabinet headed by General Constantine Sinescu included Socialist and Communist representatives. An armistice was signed September 12 in Moscow. Following withdrawal from the cabinet of members of National Democratic Front (NDF), a political group formed by the Communists, Socialists and subsidiary parties, Sinescu was replaced on December 6, 1944 by General Nicolai Radescu. After continued Communist agitation and Soviet pressure, Radescu was replaced on March 6, 1945 by Dr. Petru Groza, leader of the Peasants' Front, an NDF affiliate. Groza formed a cabinet consisting of 12 NDF ministers and 4 nonparty members. All Liberal and Peasant Party ministers were dropped.

As one result of the Moscow Conference in Dec. 1945, a tripartite commission proceeded to Rumania to advise the King on broadening the government. On Jan. 1, 1946 one representative each of the Peasants and Liberal Parties was added to the cabinet, and on Feb. 5 the United States and Britain recognized Rumania conditionally upon the holding of free elections.

GOVERNMENT. Pending the signing of the final peace treaty, Rumania is controlled by an Allied Control Commission composed of U. S., British and Soviet military representatives. The Soviet chairman of the commission is also the commander of Soviet occupation troops in Rumania. U. S. and British participation is for the most part nominal and the country is actually controlled by Soviet military forces.

SOVEREIGN. Michael I, born October 18, 1921, son of King Carol II and Queen Helen of Greece, was proclaimed King on the death of his grandfather, Ferdinand, July 20, 1927 under a regency. On his father's return to the throne on June 1, 1930, he again became crown prince, but was proclaimed King again on Carol's abdication on Sept. 6, 1940.

The constitution of 1923, abandoned during the regime of King Carol II, was restored by royal decree on Sept. 2, 1944. This constitution provided for a Senate composed partly of hereditary and partly of elected members and of a chamber of deputies elected by universal su-

Frage. There had been no general election since December 1937, and parliament was dissolved on September 5, 1940. Since there is no legislative body the government is carried on by decrees which must receive the royal assent. Executive power is vested in the cabinet. Local government is controlled by the Minister of the Interior.

On July 14, 1946, King Michael issued a decree abolishing the Senate and called for elections in late Autumn to pick a chamber of deputies. In that election the Communists won in an election not regarded as free abroad.

Military service is compulsory from twenty-one with an initial training period (1940) of three years and service on reserve until fifty. The army in 1940 had 200,000 active and 1,000,000 reserves. The air force in 1939 had about 35,000 men and 1,000 planes.

The army, now being reorganized and re-equipped with Soviet assistance, has been unofficially estimated at about 200,000 troops, organized into approximately 15 divisions. Soviet occupation troops in July 1946, were unofficially estimated at 390,000. This figure included a large number of troops being regrouped in Rumania prior to return to the Soviet Union for demobilization. The navy on Dec. 31, 1945, was estimated to number 3 destroyers, 3 submarines, 1 mine layer and some minor war vessels. Several warships were appropriated by the Red Fleet.

Education is free and compulsory. There are two universities: Bucharest (founded 1864), and Jassy (1863). The state Church which is governed by a Holy Synod professes the Eastern Orthodox creed. Its independence was recognized by the Oecumenical Patriarch of Constantinople in 1885. The clergy of the Orthodox Church and of the Uniat (Greek Catholic) Rumanian Church are paid by the State.

In its economy Rumania is predominantly agricultural with about 80 percent of the population engaged on the soil. In wheat, rye and other grains, it is one of the richest countries of southeastern Europe. In 1939 the largest acreage was devoted to corn with a production of 6,670,238 tons, and wheat with a production of 4,908,321 tons. (These statistics included production in Bessarabia and Bukovina since ceded to Russia.) Other crops are flax, hemp, fruit, vegetables, potatoes, sugar beets, sunflower seeds, tobacco and grapes. Stockraising, particularly of sheep and cattle, is also important.

Agrarian reform measures effected in 1945 provide for the distribution of the estates over fifty hectares in lots of twelve and one half hectares to each peasant. Collectivization was not included in the program but all cattle and implements became the outright property of the State

and were to be concentrated for lease to farmers.

The chief industries—flour milling, brewing and distilling—are directly connected with agriculture. However, the iron and steel, and metal and machinery industries expanded considerably after the initiation of the rearmament program in 1935. In 1936 there were 3,553 industrial establishments with 260,934 workers and output valued at \$376,036,300. The most important by value of output were food processing, textile, metal, chemical, and wood and paper.

Exports in 1939 amounted to \$190,641,000 and imports, to \$162,774,000. The principal exports were petroleum products, 41.9 percent; cereals and cereal products, 26.9 percent; wood and wood products, 9.4 percent; live animals, 6.7 percent; and seeds, 5 percent. Principal imports, by percentage, were: iron and manufactures, 29.6; machinery, apparatus, and motors, 19; vegetable fibers and products, 12.9; metal and metal products, 7.6; and vehicles, 7.7. The chief customers, by percentage, were: Germany, 32.3; Britain, 14.1; Italy, 12.1; Czechoslovakia, 10.9; France, 3.4. The principal suppliers also by percentage, were Germany, 39.3; Czechoslovakia, 16.8; Italy, 8.8; France, 8.2; and Britain, 5.9.

DANUBE RIVER. The Danube, flowing along the southern border for over 200 miles, is a highly important commercial artery; in 1938 traffic amounted to 2,834,013 tons. Before World War II, traffic on the maritime Danube from the sea to Braila was controlled by the European Danube Commission composed of representatives of Great Britain, France, Italy and Rumania. Traffic on the fluvial Danube from Braila to Regensburg was under the control of the International Danube Commission. Trans-shipment between seagoing vessels and river barges is made at Galati and Braila. The Rumanian Sea and River Navigation company with one-fourth of its capital furnished by Russia and three-fourths by Rumania, now monopolizes river and sea transport. The principal seaport is Constanta. Railway and highway mileage in 1938 (including territory since ceded to Russia and Bulgaria) were 6,980 and 65,670, respectively. The Sovrom Civil Aviation Company, under Russian management but equally financed by Russia and Rumania, has the monopoly for all civil air transport inside Rumania and to the Black Sea. Pipelines total 1,997 miles.

Government revenue in 1939 was \$225,238,792 against expenditure of \$215,493,877. The national debt was \$740,450,141 in 1939. On Nov. 2, 1945, there was announced the formation of a joint Soviet-Rumanian Bank, equally financed by both countries.

The Carpathian Mountains divide Rumania's upper half from north to south and connect near the center of the country

with the Transylvanian Alps. North and west of these ranges lies the Transylvanian plateau, and to the south and east are the plains of Moldavia and Walachia. The last 190 miles of the Danube River flows through Rumanian territory, reaching the Black Sea at Sulina. Other principal rivers are the Prut forming the northeastern boundary with Russia and joining the Danube east of Galati; and the Siret flowing south through Moldavia, also joining the Danube east of Galati.

The Moldavian-Walachian region has hot summers and extreme frost and blizzards in winter. Variations are less extreme in Transylvania and the Banat. Bucharest's average summer temperature is 72 degrees; winter, 27 degrees. In some winters the Danube is ice-bound for as long as three months.

By far the most valuable of Rumanian minerals is oil, produced chiefly in the Polesti region about fifty miles north of Bucharest. In 1939 the output was 45,600,000 barrels, valued at \$45,464,450, about 2 percent of the total world production. For 1944 production was estimated at 25,600,000 barrels. Natural gas from Transylvania is the second most important mineral, coming to 60,917,978,250 cubic feet in 1938. Other 1939 mineral output figures were: coal, 318,565 tons; lignite, 2,535,290 tons; iron ore, 145,495 tons; silver, 712,731 ounces; and gold, 211,496 ounces. The Russo-Rumanian Oil Company, with a capital of 5,000,000,000 lei and equal participation by both countries, now controls all former German oil firms and has a monopoly on new exploitation and development.

About 20 percent of the country is forested. Wood exports are important, amounting in 1939 to 948,000 tons valued at \$17,991,000.

The fisheries of the lower Danube rank second in Europe only to the Volga in richness among river fisheries, but those of the Black Sea are negligible.

El Salvador (Republic)

(República de El Salvador)

Area: 13,176 square miles.

Population (est. 1945): 1,935,000.

Density per square mile: 147.4.

President: General Salvador Castañeda Castro.

Principal cities (est. 1943): San Salvador, 107,813 (capital); Santa Ana, 46,806 (coffee, sugar); Nueva San Salvador, 24,016 (trading center).

Monetary unit: Salvadorian colón.

Racial stock (est. 1939): Mestizo, 78%; Indian, 11%; White, 11%.

Language: Spanish.

Religion: Roman Catholic.

Pedro de Alvarado, a Cortes lieutenant, conquered El Salvador in 1525, and the area was administered as part of Guatemala until the general Central American revolution against Spain in 1821. El Salvador struggled out as an independent republic in 1841 after the dissolution of the Central American Union. Its story since then is one of revolution and strife.

In January of 1931 the first free election in twenty years named Arturo Araujo president. He was overthrown before the year was over. General Maximiliano Hernández Martínez, his successor, remained in power until 1944 when a general strike forced his resignation. The next regime, also militarist led, lasted only five months and was succeeded March 1, 1945, by the present government.

The 1886 constitution provides a president popularly elected for four years and ineligible to succeed himself; also, a one-house legislature. Each regional department is administered by a governor named by the president. Higher court judges are elected by the national legislature. The military is an army limited to 3,000, a militia, a national guard, and a small air force.

With the second lowest illiteracy rate in Central America, El Salvador provides free and compulsory education; both public and private schools are state-controlled. Primary schools in 1941 numbered 1,330 with enrollment of 89,792; fifty-eight intermediate schools had 3,309 pupils; and the national university had 506 students.

The majority of the population is mixed white and Indian, but the governing class is composed chiefly of the white group of Spanish colonial origin.

El Salvador probably is the most intensively cultivated of Latin American nations with more than 80 percent of its land planted. Coffee, the big export crop, (92,000 bags of 152 pounds each in 1945) is controlled in volume by a commission of government and planters. Corn, sugar, beans, rice, tobacco, cacao, indigo, miller and sisal fiber are other products. There is some cattle raising and a few local factories, including a monopoly on the supply of henequen bags for coffee.

There are two railways with 375 miles of track. One, British-owned, joins San Salvador and Acajutla, the principal port. The other, American-owned, runs from the eastern port of La Unión through San Salvador and into Guatemala. All-season highways total 1,378 miles, with an additional 2,300 miles of unimproved roads. TACA and Pan American provide air service.

El Salvador's public debt in 1943 was 52,162,000 colóns. British investments in 1944 were 1,355,240 pounds; U. S. direct investments in 1940, \$11,204,000.

El Salvador is the smallest, most densely populated of Central American nations, and the only one without an eastern coast. Most of it is a fertile volcanic plateau about 2,000 feet high. It has several volcanoes, some still active, and many lovely crater lakes. One of these, Lake Ilopango, is a landing place for seaplanes. The mountain ranges along the borders of Guatemala and Honduras give the highlands an almost temperate climate, but the lowlands are often hot and sultry.

Gold, silver, coal, copper, iron, zinc, mercury, and sulphur are the nation's minerals. Gold production in 1943 (29,008 fine oz.) was valued at \$985,656; silver production (220,976 fine oz.), at \$99,444. Forest resources, much smaller than in other Central American states, include dye-wood, mahogany, cedar, and walnut. A leading source of balsam, a medicinal gum, El Salvador exported 101 tons in 1942.

San Marino (Republic)

Area: 38 square miles.
Population (census 1939): 14,547.
Density per square mile: 382.8.
Executive: Two regents selected every six months by the Grand Council.
Principal city: San Marino (capital).
Monetary unit: Lira.
Racial stock: Italian.
Language: Italian.
Religion: Roman Catholic.

San Marino, the oldest and smallest republic in the world, is about one-tenth the size of New York City. It has no army, no public debt, no wealth, no poverty, and is entirely surrounded by Italy, in the pennines near Rimini. According to tradition San Marino was founded about 350 B. C. and had good luck for centuries in staying out of the interminable wars and raids on the Italian peninsula. The Pope recognized its independence in 1631.

San Marino hires its police and judges from Italy. It no longer confers titles for consideration, but it does derive much revenue from the exporting of its postage stamps which are changed often to keep philatelists buying. Other exports are barley, wine and cattle, and building stone from Mount Titano.

Executive power is exercised by regents, two of whom are appointed every six months from the popularly-elected Grand Council. There are several elementary schools and one high school whose diplomas are recognized by Italian universities. San Marino is linked with Rimini on the Adriatic by a twenty-mile electric railway. In 1944 the people tore up part of the line in an effort to keep fleeing German troops out of their country which already was jammed with 100,000 displaced persons.

Siam (Kingdom)

(Thai)

Area: 198,247 square miles.
Population (est. 1940): 15,717,000.
Density per square mile: 78.6.
Ruler: King Phumiphon Aduldet (under regency).

Prime Minister: Rear Admiral Thawan Dhamrong Navaswat.

Principal cities (census 1937): Bangkok, 684,994 (chief port, commercial center); Khonkaen, 473,475 (trading center); Chiangmai, 443,476 (rice, teak); Chiangrai, 60,000 (Northern trading center).

Monetary unit: Baht or tical.

Racial stock (1937): Thai, 90%; Chinese, 3.4%; Indian and Malayan, 3.4%; Cambodian and Annamese, (60,000); White, 2,000; Others, 2.5%.

Languages: Siamese, Chinese.

Religions (census 1937): Buddhist, 95.0%; Moslem, 4.3%; Christian, .4%.

*Including about 2½ million people of Chinese descent born in Siam.

The Siamese race first began moving down into Siam from the Asiatic continent in the 6th century A. D., and by the end of the 13th century, ruled most of the western portion. Over the next four hundred years the Siamese fought sporadically with the Cambodians to the east, the Burmese to the west. The British obtained recognition of paramount interest in Siam in 1824, and in 1896 an Anglo-French accord guaranteed Siamese independence. In 1909 Siam renounced claims to suzerainty over four Malayan states in return for a partial cessation of British interference in Siamese internal affairs. Siam declared war on Germany in 1917.

A coup on June 24, 1932, changed the absolute monarchy into a representative government with universal suffrage, and a second revolt in June, of 1933, forced the king to appoint a liberal cabinet. Thus shorn of much power, King Prajadhipok abdicated in March of 1935 in favor of his nephew, Prince Ananda Mahidol. After a few hours of token resistance on Dec. 8, 1941, Siam agreed to Japanese occupation and the country was one of the springboards in World War II for the Japanese campaign against Malaya. After the fall of its pro-Japanese puppet government in July of 1944, Siam pursued a policy of passive resistance against the Japanese, and on Aug. 16, 1945, after the Japanese surrender, Siam repudiated the declarations of war it had made against Britain and the United States in 1942.

King Phumiphon Aduldet, born in 1928, second son of the late Prince Mahidol of Songkhla, succeeded to the Siamese throne on June 9, 1946, when his brother, King Ananda Mahidol, died of an accidental gunshot wound. A regency council was named on June 16 to serve until the King reaches majority.

Siam has a unicameral assembly of 182 members, half of them named by the King, half elected for four years by universal suffrage. The King exercises executive power through a state council of fourteen to twenty-four members headed by the Prime Minister. For administration, Siam divides into seventy provinces each under a commissioner.

The 1937 defense act made military service compulsory for a period of two years between the ages of eighteen and thirty. The army had 30,000 regulars in 1940, and there was a fair-sized air force. On Dec. 31, 1945, the navy had four coast defense ships, a destroyer, three submarines, and other small craft.

Buddhist monasteries throughout Siam supply most of the elementary education in rural districts. In 1939 there were 429 government schools with 61,297 pupils, 11,072 local and municipal schools with 1,484,483 students, and two universities with 11,525 students. More than 77 percent of local and 23 percent of government schools were in monasteries. In 1937 the literacy rate was 31 percent.

Four-fifths of the Siamese work at agriculture. Rice—4,923,315 tons were produced in 1940—is the principal crop, the staple food and the leading export. Next most important and growing rapidly is rubber—41,266 tons in 1939. Other products include coconuts, corn, tobacco, cotton, sesame, sugar cane and soybeans. Livestock, poor in quality and quantity, is used mainly for hauling. In 1938 Siam counted 10,970 elephants, 385,565 horses, 5,711,720 bullocks and 5,551,232 buffaloes. Manufacturing is of little importance, except for native handicraft and food processing.

Exports, largely rice and tin, were \$95,000,000 in 1941, and included rubber, teak, gold, hides and fish. Imports were \$60,000,000, including cotton textiles, foodstuffs, oil, machinery and electrical appliances. Domestic business is largely controlled by Chinese.

Siam has good water routes. Bangkok, the chief port, twenty-five miles up the Menam River from the Gulf of Siam, handles about 80 percent of the foreign trade. Railways under government ownership total about 2,050 miles. In 1939 there were about 3,633 miles of highway. Air transport was well developed even before World War II.

Revenue in 1940 amounted to \$45,890,066 and expenditures, \$45,889,292. The public debt was \$25,510,154.

Siam, more than two-thirds the size of Texas, supports most of its population in the central alluvial plain which is drained by the Menam River and tributaries. The climate is monsoonal but the full force of the monsoons is broken by the western frontier hills. Rainfall decreases from

south to north. Humidity is always high but temperatures fall as low as 40 degrees in the November-February cool season.

Siam has small deposits of many important minerals, and some precious stones. Only tin, gold and tungsten are in commercial production. Tin output in 1940 was 20,841 tons—10 percent of the world total. Tungsten output was 517 tons in 1939.

The main forest product, taken from the northern hill country, is teak—73,486 tons in 1938. Others include theng, wood, iron wood, ebony and rattan.

Fisheries, both ocean and river, ordinarily rank second to agriculture in product value. The average catch of 40,000 tons includes mainly mackerel, also anchovies, mollusks and shellfish.

Spain (España)

Area: 194,947 square miles.

Population (est. 1944): 26,761,902.

Density per square mile: 137.2.

Chief of State: Gen. Francisco Franco Bahamonde.

Principal cities (est. 1944): Madrid, 1,140,610 (capital); Barcelona, 1,108,961 (chief port, textiles); Valencia, 508,072 (silk, oranges); Seville, 347,997 (wines, iron ore); Zaragoza, 266,488 (RR center); Malaga, 258,598 (seaport).

Monetary unit: Peseta.

Racial stock: Spanish, Basque, Catalan.

Language: See Racial stock.

Religion: Roman Catholic.

HISTORY. Spain, twice the size of Oregon and once one of the world's great powers, holds a somewhat tainted position among nations today. The Franco dictatorship helped substantially by Hitler and Mussolini, won control of the country in the civil war of 1936-39 and, then, by staying nominally neutral in World War II, managed to survive the defeat of the Nazi and Fascist powers. The survival, however, was not without its cost. Spain today is the only non-enemy state of World War II that is specifically barred from United Nations membership.

From 201 B. C. to 406 A. D. Spain was part of the Roman Empire. Then the Goths and the Vandals formed a powerful kingdom which was semi-conquered in the 8th century by the Moors from Africa. The last Moorish stronghold, the Kingdom of Granada, fell to the forces of King Ferdinand and Queen Isabella, who were trying to unify Spain, in 1492. In the same year, the Spanish-financed explorer Christopher Columbus was discovering the new world for the Spanish crown.

Charles V (1516-55) became King of Spain and also Holy Roman Emperor. Under his son, Philip II, Spain reached its

peak of its power, but the beginning of decline was marked when the British defeated the Invincible Armada in 1588.

The line of Spanish Hapsburgs ended in 1700. The War of the Spanish Succession followed. By the Treaty of Utrecht, in 1713, Spain was forced to accept a Bourbon king, the Duke of Anjou, and lost Gibraltar and all holdings in the Netherlands and southern Italy. Then, while the Spaniards were resisting Napoleon's efforts to establish a Bonaparte line in Spain, most of their colonies in America revolted and became independent. The loss of Cuba, Puerto Rico and the Philippines in the Spanish-American War of 1898 left Spain with only a few scattered possessions in Africa. Neutrality was maintained during World War I.

From 1923 to 1930 Spain was a military dictatorship under General Miguel Primo de Rivera. A wave of republicanism in 1931 forced the abdication of King Alfonso XIII and a new constitution was drawn declaring Spain to be a workers' republic. Several revolts, strikes and shifts of government kept Spain in chaotic shape and then in July of 1936, the army revolt led by Generalissimo Francisco Franco burst into civil war.

While Hitler and Mussolini helped Franco, Russia helped the Loyalist side. The last Loyalist forces surrendered on March 29, 1939. Spain became a dictatorship under Franco, and signed the anti-Comintern pact in 1939.

In World War II, while he shied away from the risk of becoming a belligerent, Franco was pro-Axis in sympathy, helped the Axis with material, intelligence and services to German U-boats, and even sent the Spanish Blue Division to fight against Russia.

Monarchist sympathies remained strong both in and out of the Falangist Party. Ex-King Alfonso died in Rome early in 1941. His son and pretender to the throne, Don Juan, while denouncing Franco's regime, met with the latter's representatives in Lisbon in February 1946 in an unsuccessful attempt to work out a plan for the re-establishment of a constitutional monarchy. On the republican side, a Spanish "Government-in-exile" was formed in Mexico City, in August, 1945 with Diego Martinez Barrio as president and José Giral as premier. This government has been recognized by several countries.

GOVERNMENT, NATIONAL. Franco is head of the state, national chief of the Falange Party, prime minister and Caudillo (leader) of the empire. Practically, the country is ruled by the cabinet, appointed by Franco, the National Council of the Falange Party and to a lesser extent, the Cortés (Parliament). The principal mission of the Cortés is the planning and

formulation of laws without prejudice to the veto power which belongs to the head of the state. Cabinet ministers, party officials, civil governors, university heads, and the president of learned bodies become members of it ex-officio. There is no provision for the introduction of legislation by any of the 438 Cortés members.

LOCAL. The Nationalist state abrogated the statutes under which Catalonia and the Basques had regional autonomy and modified legislation dealing with provincial and home rule. The government appoints the members of provincial deputations, the civil governors of the 50 provinces, and the mayors and councilmen of the municipalities.

DEFENSE. Franco is commander-in-chief of the army, navy and air force, each administered by a cabinet minister responsible to him. Military service is compulsory for a period of two years. The standing army, estimated at 650,000 men, is divided into 25 divisions. Planes in service are predominantly German and Italian. The air force in 1940 had 100,000 men and 50,000 reserves. The Navy in 1945 had 6 cruisers, 16 destroyers, 8 submarines, 6 mine layers and 3 sloops. Under construction were 20 destroyers, 8 sloops and 7 fleet mine sweepers.

SOCIAL AND ECONOMIC CONDITIONS. **EDUCATION.** The illiteracy rate was 42.35 percent in 1943. Primary education is compulsory and free; religious instruction is permitted. In 1942 there were 44,572 public schools with 3,852,897 pupils, 117 secondary schools and 170,782 pupils, 53 normal schools with 11,877 pupils, and 12 universities with 34,669 students. The universities are in Barcelona (founded in 1450), Granada (1526), Madrid (1508 and 1836), Murcia (1915), Oviedo (1317), Salamanca (1230), Santiago (1501), Seville (1502), Valencia (1245), Valladolid (1346) and Zaragoza (1474).

RELIGION. Roman Catholicism is the established religion. After the civil war the church was restored to substantially its prerepublican position; confiscated property was returned, religious education was reintroduced, and divorce was suppressed.

POPULATION. The population increased 26.7 percent from 1900 to 1930 and the civil war did not prevent an increase of 9.8 percent in 1930-40. The birth rate in 1943 was about 23.5, one of the highest in Europe, while the death rate was 12.7.

SOCIAL POLICY. The labor charter promulgated March 9, 1938 defined Spain as a totalitarian and syndicalist state. So-called vertical syndicates have supplanted all union organizations and all other organizations for the protection of the economic interests of productive groups. A branch of production extends "vertically" from the

raw material stage through the industries and firms engaged in processing and marketing. Prices, wages and production, and the distribution of merchandise are controlled.

AGRICULTURE. Spain is predominantly agricultural. The principal land uses, apart from forest, pasture and forage crops, are the production of grain, potatoes, pulse, sugar beets, oranges, grapes and olives. Since the civil war Spain has not recovered balance in production and consumption of food stuffs. Normally, Spain produces exportable quantities of oranges, lemons, almonds, filberts, raisins and other subtropical commodities. Wine production in 1945 was estimated at 15,000,000 hectoliters as compared with the annual average of 23,400,000 hectoliters during the 1926-35 period.

CHIEF AGRICULTURAL CROPS (in short tons)

	Average 1926-35	1945*
Wheat	4,547,000	2,000,000
Oranges	1,259,000	880,000
Barley	2,452,000	650,000
Corn	721,000	412,500
Oats	702,000	192,500
Rye	614,000	203,500
Olive oil	387,000	230,000

*Estimate.

INDUSTRY. The cotton, woolen and other textile industry, normally employing over 300,000 workers, is the leading manufacture. The making of paper is also important. In 1942, more than 500 companies made electrical goods valued at 500,000,000 pesetas, and the value of the output of the growing chemical industry was about the same. Pig iron production in 1945 was about 471,444 tons. Steel output was 549,-416 metric tons.

TRADE. Imports in 1942 came to \$55,657,-000, with Germany supplying nearly 20 percent of the goods. Cotton, machinery, coffee and autos were the leading imports. Exports totaled \$57,588,000, nearly 22 percent of which went to Germany. Oranges, hides, skins, cork and wines were the leading exports.

COMMUNICATIONS. The merchant fleet which suffered severely during the civil war and World War II comprised 925 vessels of 1,019,884 gross tons in 1943. The national highway system is about 45,750 miles not including 6,100 miles maintained by the provincial governments.

In 1942 there were 7,970 miles of normal gauge and 2,835 miles of narrow gauge railways, of which about 781 miles were electrified. In 1940 railways carried 44,643,-701 tons of freight. Telephones in 1944 totaled 393,000.

FINANCE. The initial budget (1946) calculated ordinary government expenditure

at 11,298,000,000 paper pesetas and revenues at 11,100,000,000 paper pesetas. The extraordinary budget amounted to 1,917,-000,000 pesetas. The air force, army, navy and government (police) departments received 48.6 percent of the total ordinary and extraordinary appropriations. The public debt in 1945 was 38,300,000,000 pesetas. Deficit financing, the enormous costs of reconstruction, and World War II contributed to persistent inflationary tendencies in 1939-45. The note issue of the bank of Spain amounting to 9,300,000,000 pesetas in July, 1940, was up to 17,900,000,-000 pesetas by the end of 1945.

NATURAL FEATURES AND RESOURCES.
TOPOGRAPHY. Spain, only twenty miles from Africa at the closest point, and separated from France by the Pyrenees, is generally a broad plateau sloping to south and east and crossed by a series of mountain ranges and river valleys. Most of the coast line is steep and rocky with few indentations. The best harbors are on the Galician coast in the north; the broadest coastal plain is on the Gulf of Cadiz in the southwest. The Guadalquivir River in the south is navigable to Seville, but most of the others are mountain streams useful only for waterpower. Hydroelectric stations—580 of them made nearly three billion kilowatt hours of power in 1938—account for 75 percent of Spain's generating capacity.

OUTLYING ISLANDS. Off its east coast 172 the Mediterranean, Spain owns the *Balearic Islands* which total 1,936 square miles. The largest is Majorca—1,405 square miles. Sixty miles west of north African coast 112 the Atlantic, Spain owns the *Canary Islands*—2,894 square miles.

CLIMATE. Most of Spain's climate is extreme. Madrid, for example, reaches a high of 110 and a low of 10 degrees. In the southeast, the protection of the Sierra Nevada range makes the climate subtropical. The northeast, with climate much like that of the British Isles, is the only region with normal rainfall. In the east and southeast irrigation is requisite to farming.

MINERALS. Spain's mineral wealth, second to agriculture in the national economy, yields millions of tons of ore and domestic manufacture and export. In 1943 the mining industry employed 209,756 workers and its output was valued at 3,554,575,000 pesetas. Following are some recent production figures, with all tons metric—coal, 11,694,000 tons in 1944; potash ore, 439,657 tons in 1943; iron ore, 1,156,924 tons in 1945; lead ore, 47,913 tons in 1943; zinc ore, 72,349 tons in 1943; iron pyrites, 514,748 tons in 1943. Spain also produces important quantities of mercury, phosphate, manganese, cobalt, sulphur, silver and gold. It is one of the major producers of wolfram for which there was a big demand in World War II. Output reached

high of 4,038 metric tons in 1943 but fell to 222 in 1945.

FORESTS. Spanish forests yield lumber, pine resins, cork and esparto. The 1939 lumber production was 180,104,715 board feet; the 1945 cork output was about 40,000 tons. In 1942 Spain produced 15,432 tons of crude resin, 11,023 tons of processed resin oil, and 3,307 tons of turpentine oil.

FISHERIES. Over 100,000 persons work in the fishing, canning and related industries. The 1943 catch, principally cod, tunny and sardines, was 445,000 tons valued at 1,055,-712,000 pesetas.

SPANISH COLONIAL POSSESSIONS

Country	Area (sq. ml.)	Population (est. July 31, 1944)
Ceuta, Melilla, Alhucemas, Chafarines, and Peñon Velez	82	145,000
Morocco, Spanish	8,080	992,000
Spanish Guinea	10,900	168,000
Western Sahara including Ifni and Spanish Sahara	116,200	72,000

Sweden (Kingdom)

(Sverige)

Area: 173,341 square miles.

Population (est. 1945): 6,597,348.

Density per square mile: 38.0.

Sovereign: King Gustav V.

Premier: Tage Erlander.

Principal cities (est. 1946): Stockholm, 671,-525 (capital); (est. 1945) Göteborg, 296,289 (chief port, shipbuilding); Malmö, 167,885 (seaport); Norrköping, 75,792 (textiles); Helsingborg, 65,357 (Baltic seaport).

Monetary unit: Krona.

Racial stock: Swedish.

Language: Swedish.

Religions: Evangelical Lutheran, 99%; Others, 1%.

HISTORY. While it has a long interior coast line, Sweden is locked into the heart of northern Europe by the downthrust of the Scandinavian peninsula. A good deal larger than California in size, and one of the world's most highly unionized and progressive of states in social welfare science, Sweden maintained a precarious neutrality during World Wars I and II and suffered the privations of being virtually cut off from world markets by British and German blockades. On the other hand, nearly everything that Sweden had to sell from 1939 on was eagerly snapped up by one side or the other, subject only to the difficulties of delivery. As a result, Sweden stood in 1946 as one of the few more or less sound and intact states of Europe.

Although ancestors of today's Swedes lived in the area as long ago as 5,000 years,

little of Sweden is known before the 10th century. Early in the 11th century, King Olaf Skottkonung united Sweden into a strong nation and established Christianity. In 1397 Sweden was united with Norway and Denmark under the Kalmar Union. After the killing of several Swedish nobles by Christian II of Denmark in 1520, the Swedes revolted under the leadership of Gustavus Vasa. Gustavus, elected king in 1523, founded the modern Swedish state and was the first European monarch to break relations with the Pope.

By the treaty of Westphalia (1648) which concluded the Thirty Years War, Sweden acquired important German areas including large portions of Pomerania. In 1700 Poland, Denmark and Russia united against Sweden. When peace was finally concluded in 1721, Sweden gave up Livonia, Esthonia, Ingria and parts of Finland. Sweden participated in the coalition against Napoleon (1805-1807) but in 1809 Finland was lost to Russia. After the ouster of King Gustavus IV in 1809, a constitutional law still in effect was adopted after which Charles XIII, uncle of the deposed king was elected king. Since Charles XIII was childless, one of Napoleon's marshals, Jean Bernadotte, was elected Crown Prince and took over effective control of the government, succeeding to the throne in 1818 as Charles XIV John. By the Peace of Kiel (1814) Denmark was forced to cede Norway to Sweden and the two countries were joined in a personal union. The union with Norway was peaceably dissolved in 1905. Neutrality was maintained throughout World War I, although the country suffered severely from the allied blockade and the sinking of merchant vessels. Sweden cooperated completely with the League of Nations and has led the movement for Inter-Scandinavian consultations since 1914. The predominant political group since World War I has been the Social Democratic Party—a moderate group adhering to the 2nd Internationale. In 1936 Per Albin Hansson formed a Social Democrat ministry which gave way on December 12, 1939 to a national coalition cabinet under his leadership. Neutrality was again maintained during World War II. On July 31, 1945 another wholly Social Democrat Cabinet was formed by Per Albin Hansson, who died in 1946.

SOVEREIGN. Gustav V, born June 16, 1858, succeeded to the throne Dec. 8, 1907. He was married 1881 to Princess Victoria (born 1862, died 1930), daughter of Friedrich, Grand Duke of Baden. Crown Prince, Gustav Adolf, born Nov. 11, 1882, married (1) 1905 to Princess Margaret Victoria (born 1882, died 1920), daughter of the Duke of Connaught; (2) 1923 to Princess Louise of Battenberg, born 1889. Offspring of first marriage, Prince Gustav Adolf born April 22, 1906, married 1932 to Sibylle, Princess

of Saxe-Coburg and Gotha. King Gustav's second son is Prince Wilhelm, born 1884. He also has 3 brothers.

NATIONAL GOVERNMENT. Sweden is a limited monarchy. Executive and judicial authority is vested in the King alone but his resolutions must be taken in the presence of the Council of State (cabinet), headed by the prime minister, appointed by the King but responsible to the Riksdag.

The Riksdag has an upper house of 150 members elected by the provincial and municipal councils for eight years, one-eighth being renewed each year. The lower chamber of 230 members is directly elected by popular vote for four years. There is universal suffrage for men and women over twenty-three. The king has the right to initiate legislation, and has an absolute veto over any bills except taxation bills.

RIKSDAG

Parties	Upper Chamber*	Lower Chamber†
Social Democratic	84	115
Conservative	23	39
Agrarian	21	35
Liberal	14	26
Communist	3	15
	150	230

*One-eighth elected each year.

†Election of September, 1944

PROVINCIAL GOVERNMENT. Sweden is divided into 25 administrative districts (län). Each district has a locally elected council or landsting and is headed by a governor appointed by the national government. Seven of the largest towns are administered separately by municipal councils.

JUDICIARY. The administration of justice is entirely separate from the government. The highest court is the Supreme Court; there are 4 high court districts and 186 district court divisions.

DEFENSE. Military service is compulsory from the ages of 20 to 47; the initial training period is 15 months. The King is commander in chief of all the armed forces. Under him is a commander in chief heading the 3 services. The standing army numbered 350,000 and reserves, 275,000 in 1940. The army is well-equipped with the latest type weapons, many of them developed in Sweden. The air force had 3,000 personnel and 257 planes. The Navy on Dec. 31, 1945 had 4 cruisers, 7 coast defense ships, 27 destroyers and large torpedo boats, 26 submarines, 2 minelayers and numerous smaller craft. Naval personnel numbers about 12,000 in addition to the coast artillery which is under naval jurisdiction.

EDUCATION. Public elementary education

has been free and compulsory since 1882. The school age is from 7 to 14. In 1942 there were 529,750 pupils in the regular elementary schools, 53,868 students in secondary schools. The two universities—Uppsala (founded 1477) and Lund (1668)—and three other schools of university grade had a total enrollment of 8,937 in 1944. The state also provides a large number of special vocational and continuation schools. The national church is the Swedish Lutheran Church of which the King is the supreme administrator.

POPULATION. The average annual birth rate (1936-38) was 14.5; the average annual death rate, 11.8. Emigration, especially to the United States, increased rapidly after 1860, reaching its maximum during the period from 1881 to 1890 when the average was 37,640 per year. About 600,000 Swedes have emigrated to the United States. Immigration has exceeded emigration for the past few years.

SOCIAL WELFARE. The extremely well-developed cooperative movement is a powerful factor in the country's economic life. The cooperatives account for about 11 percent of the total retail trade and over 20 percent of the grocery business. Social reform, also well-advanced, includes unemployment relief, loans and grants for housing, medical care, care of the indigent and the aged, and a public works program to curtail unemployment.

AGRICULTURE. Grain, hay, potatoes and sugar beets are major products of the broad fertile plains of the south; cattle raising and dairy farming predominate in the north. The 1944 livestock census showed 603,867 horses, 2,858,949 cattle, 553,290 sheep, 1,053,865 swine. Butter production in 1942 was 72,043 metric tons; cheese, 14,522 tons.

MAJOR AGRICULTURAL CROPS, 1943

Crop	Acres	Tons
Barley	279,510	256,418
Grain (mixed)	683,706	545,288
Hay	4,113,983	4,709,731
Legumes	96,587	57,888
Oats	1,419,840	837,297
Potatoes	368,848	2,393,228
Root crops (fodder)	159,478	2,499,308
Rye	543,244	446,158
Sugar beets	124,327	2,059,378
Wheat	663,356	577,848

INDUSTRY. Industrial establishments in 1942 numbered 19,955 with 580,773 workers. The highly specialized machine industry produces separators, motors, electrical machines and apparatus, agricultural machinery, ball bearings, telephonic equipment and harbor works. There are also large woollen, glass and porcelain industries. Shipyards build both for Sweden and foreign fleets. The timber and wood

working industries are extensive. The match industry with 8 factories is one single trust which now covers the whole world and, with the help of British and American capital, monopolizes the production of matches in most countries. The total value of the output of Swedish industry in 1939 was almost \$2,000,000,000.

TRADE. Imports in 1944 amounted to 1,777,382,000 kroner and exports to 853,096,000 kroner. Of the 1943 exports, 45.5 percent were minerals and metals (including manufactures), 34.7 percent were food goods, pulp, paper and products thereof, 15.2 percent were machinery, transportation equipment and instruments. Of the imports, 30.5 percent were minerals and metals (including manufactures), 20.0 percent were animal and vegetable products, 18.8 percent were hides and skins, rubber, textile materials and products and 18.3 percent were machinery, transportation equipment and instruments. Almost half of the trade was carried on with Germany; the rest was carried on with the Allies and Baltic countries, Switzerland, the Balkans and Italy.

COMMUNICATIONS. In 1945 the merchant marine totaled 1,555,300 gross tons, largely efficient motor vessels. The chief port is Göteborg, followed closely by Stockholm. The highly developed railway network totaled 10,231 miles in 1941; by 1943 the electrified lines comprised half the trackage and carried 85 percent of the freight volume. In 1943 there were 55,550 miles of road, mostly improved. By means of ferry steamers, Swedish state railways are in direct communication both with Germany and Denmark. Telephones in 1943 numbered 1,075,000 (165 per 1,000 persons), making the telephone system second only to the United States on a per capita basis.

FINANCE. Expenditures (1944-45) were estimated at 4,416,061,000 kr. and revenues at 3,186,448,700 kr. The national debt (July 31, 1945) totaled 11,163,800,000 kr. Defense expenditures accounted for almost 50 percent of the 1944-45 budget. The Riksbank or National Bank of Sweden, belonging entirely to the state, is the sole bank of issue.

TOPOGRAPHY. Sweden, with extreme length of 990 miles and breadth of 250 miles, slopes eastward and southward from its peak elevation in the Kjölen mountains along the Norwegian border. In the north are mountains and many lakes. To the south and east are central lowlands, and south of them are fertile areas of forest, valley and plains. Along Sweden's rocky coast, chopped up extensively by bays and inlets, are many islands, the largest of which are Gotland (1,220 square miles) and Ömmland (519 square miles.) Fifteen percent of Sweden is within the Arctic Circle, but the country is land-

locked to the north. Eight percent of Sweden is covered by lakes—a larger percentage than in any other European country except Finland. Most of the rivers are in the north and west, draining into the Gulf of Bothnia.

MINERALS. Sweden's iron ore deposits are among the world's richest, especially for quality. Those in central Sweden produce principally for domestic use, while the ones in Lapland to the north are worked largely for export, with much of the output being shipped through the Norwegian port of Narvik. Production for 1941 in long tons was: iron ore, 10,527,889; iron and steel, 1,165,593; bar iron and steel, 821,547. Gold production in 1939 was 2,149,242 ounces; and silver, 7,226,928 ounces. Other important minerals are copper, arsenic ore, manganese, lead, pyrite ore and zinc. Coal production—400,000 tons a year—is small comparatively and forces large scale imports, nearly eight million tons a year. Wood and peat are extensively used as fuel. Sweden's many waterfalls have an estimated potential of 4,500,000 horsepower. The largest hydroelectric works are state-owned.

FORESTS. About 60 percent of Sweden is forested, mostly in pine, and vast forest products industries are at work in the north, floating logs eastward to sawmills and factories on the Bothnian coast. Sweden, with about 3,000 sawmills and wood-goods factories and 430 pulp and paper mills employing 100,000 men, supplies 25 percent of the world's mechanical pulp and 50 percent of the world's chemical pulp. To protect that great natural asset, scientific forestry is well advanced.

FISHERIES. Sweden's average annual catch is about 140,000 tons, half of it in small Baltic herring. Cod, mackerel and sprat also are taken in the Baltic, and the inland lakes and rivers are well stocked with salmon, trout and perch. The fish catch in 1938 was valued at \$7,827,544.

Switzerland (Republic)

(Schweiz-Suisse-Svizzera)

Area: 15,940 square miles.

Population (est. 1945): 4,343,000.

Density per square mile: 272.4.

President (1946): Dr. Philipp Etter.

Principal cities (census 1941): Zürich, 336,395 (textiles, banking); Basel, 162,105 (RR center, Rhine port); Bern, 130,331 (capital); Genève (Geneva), 124,431 (intellectual center).

Monetary unit: Swiss franc.

Racial stock*: Swiss, 91.2%; German, 3.6%; Italian, 3.1%; French, .9%; Others, 1.2%.

Languages (1930): German, 71.9%; French, 20.4%; Italian, 6.0%; Romansch, 1.1%.

Religions (1930): Protestant, 57.3%; Roman Catholic, 41%; Jewish, .4%; Others, 1.7%.

*By place of birth.

Switzerland, twice the size of New Jersey, is a tourist mecca, but its rugged scenery is more than a commercial asset. Europe's aggressors for centuries, right up through World War II, have usually left Switzerland in peace, largely because the cost of its conquest against the formidable natural barriers would be excessive.

Swiss history is principally the story of the drawing together of various fiefs of the Holy Roman Empire into a single union. The process began in 1291, with the cantons of Uri, Schwyz and Nidwalden as the nucleus. Over the next 300 years, ten new cantons entered the federation which nominally remained as part of the Holy Roman Empire until the Treaty of Westphalia gave it independence in 1648.

The French revolutionary army succeeded in occupying Switzerland in 1798 and organized it as the Helvetic Republic, but Napoleon restored the federation in 1803. After the addition of three more cantons in 1814, the Congress of Vienna declared Switzerland an independent, neutral state in perpetuity, and fixed the nation's borders as they exist today. Out of the brief Swiss civil war of 1847 came the democratic constitution of 1848, which was influenced by the U. S. Constitution.

Switzerland maintained strict neutrality in World Wars I and II, during which Swiss diplomatic delegations represented the interests of many of the belligerents. Both the Allies and Germany bombed several Swiss cities by mistake in World War II. The accidental U. S. raid of April 1, 1944, on Schaffhausen killed fifty persons and injured several hundred.

Since the adoption, in 1874, of their constitution, the Swiss have had a federation of twenty-two sovereign cantons. Each canton has its own legislature, executive and judiciary departments, and the cantons have the right of veto over federal legislation through the referendum.

The federal legislative assembly has two houses—a Council of State of forty-four members, two from each canton, and a National Council of 194 members elected for four-year terms. The seven members of the cabinet are elected for four years by the federal assembly, which also elects the Swiss president from among its own members for a period of one year. The federal government is supreme in matters of war, peace and treaties, and regulates the army, railroads, postal service, mints and national bank note issues.

In peacetime, the highest Swiss army officer is a colonel. In wartime a commander in chief is named with rank of general. Since the army is a national militia, it maintains no standing forces, but military service is compulsory from the ages of eighteen to sixty, with an initial training period of about three months and

an eleven-day refresher course once a year. The force of men trained and physically fit is about 650,000. The air force has 5,000 personnel and 220 planes, maintained under the general staff.

Primary education is compulsory and free. In 1943 primary schools had 443,161 pupils, and secondary and lower middle schools had 73,387. There are seven universities with total enrollment of 11,781 in 1944.

Religious freedom is guaranteed under the constitution. German, Italian and French were recognized as national languages in 1874, and Romansch, a dialect of the Alpine regions, was also made official in 1937. The average annual birth rate was estimated at 19.6 in 1943; the death rate, 11.3.

With nearly a fourth of its land unproductive, and with half of it in pasture or forest area, Switzerland is dependent on imports for food supply.

Wheat, potatoes, fruits, cereal, sugar beets and grapes are grown but stock raising and dairy farming account for three-fourths of the agricultural production. In 1944 there were 1,497,436 cattle, 209,075 sheep, 218,485 goats and 599,528 pigs. Production of cheese in 1943 was 11,300 metric tons. Slightly over 20 percent of the population is engaged in agriculture.

Manufacturing is the principal economic activity, with over 40 percent of the population being sustained by manufactures and mechanical pursuits. Industry is conducted largely in small plants using highly skilled workers. Almost all the raw materials are imported, and products consist almost exclusively of high grade, expensive commodities. In 1939 there were 244,000 industrial establishments with 1,285,493 workers. Leading manufactures include chemical products, machines, watches, textiles, aluminum, apparatus and instruments, shoes and fine handmade embroidery. Chief agricultural industries are the manufacture of fine cheeses and condensed milk. With its many scenic attractions, Switzerland draws the heaviest and most profitable tourist trade in Europe. 43,000 Swiss are normally employed in the hotel industry whose receipts normally exceed \$50,000,000 a year.

Switzerland is dependent on foreign trade for its prosperity. Exports in 1944 totaled 1,473,700,000 francs of which 28 percent went to the United States. Imports in 1945 totaled 1,225,400,000 francs. In 1939 Germany accounted for 23.3 percent of the imports and 14.8 percent of the exports. The major exports are watches and machines, followed by dyes, aluminum, drugs, cotton goods, instruments and apparatus, chemical products and cheese. Major imports are coal (1939: 4,373,000

tons), industrial chemicals, iron and steel, wheat (1939: 551,000 tons), other cereals, machines, iron and steel manufactures and raw cotton.

The Rhine, navigable from Basel to the North Sea, is the principle inland waterway; in 1938 it carried 2,981,190 tons of freight. Railways built over rugged terrain entailing construction of many bridges and tunnels totaled 3,218 miles in 1945, mostly electrified. Traffic in 1943 was 20,-643,000 metric tons. The railroads are of great strategic importance in communications between Germany and Italy. Road mileage totals about 10,200 miles. State aerial service is gradually being developed. Telephones numbered 567,517 in 1944.

Revenue in 1944 was estimated at 389,-300,000 francs and expenditures, 512,600,000 francs. The total public debt of the confederation amounted to 6,174,614,085 francs (including the railroad debt, 8,343,-805,385 francs). The Swiss National Bank, the sole bank of issue, had 4,502,300,000 francs in gold and 249,200,000 francs in other assets in 1945. Swiss investments in the United States in 1938 totaled \$2,500,-000,000.

Most of Switzerland is an irregular, mountainous plateau bordered by the great bulk of the Alps on the south, by the Jura Mountains on the northwest. Its greatest length is 226 miles, greatest width, 137 miles. A fourth of its total area is covered by mountains and glaciers which make the beautiful scenery that draws the country's great tourist trade. The highest peaks are Monte Rosa (15,196 feet) and Matterhorn (14,780), both on the Italian border, and the Jungfrau (13,667 feet), south of Interlaken. The sources of the Rhine, Rhone and Aar are in Switzerland. The country's largest lakes, Geneva, Constance, Boden See and Maggiore, straddle the French, German, Austrian and Italian borders, respectively. Neuchatel, 92 square miles, is the largest wholly Swiss lake. Switzerland has hundreds of beautiful waterfalls. The one on the Rhine, near Schaffhausen, is a hundred feet high and 340 feet wide. Many others are higher but have less volume.

The climate is temperate and varies greatly with altitude. January, for example, averages 31.8 degrees at Basel which is 909 feet in elevation, and 16.2 degrees at Santis, with altitude of 8,202 feet.

Swiss minerals are negligible, except for aluminum whose production totaled 5,500 tons in 1944. Small amounts of iron, gold and coal also are found. Nearly 25 percent of the country is covered by forest, mainly pine, fir and larch but with great patches of oak, beech and maple in the lower altitudes.

Syria (Republic)

Area: 73,587 square miles.

Population (est. 1942): 2,800,000.

Density per square mile: 38.0.

President: Shukri el Quwatli.

Prime Minister: Saadullah Jabry.

Principal cities (census 1935): Damascus (Damas) 193,912 (capital); Aleppo (Alep), 177,313 (northern trading center); Homs, 52,-792 (farming, silk); Hama, 39,960 (Bedouin trading center).

Monetary unit: Syrian-Lebanese pound.

Racial stock: Arab, Armenian, Circassian, Kurd, Turkish, French.

Languages: Arabic, Aramaic, French.

Religions (1938): Moslem (Sunni), 69.8%; Moslem (Alawite), 11.0%; Greek Orthodox, 4.6%; Armenian Orthodox, 3.5%; Moslem (Druze), 3.1%; Others (Syrian Orthodox and Catholic, Greek and Armenian Catholic, Israelite, etc.), 7.9%.

Ancient Syria was conquered by Egypt in 1500 B. C., and after that by Hebrews, Phoenicians, Assyrians, Chaldeans, Persians and Greeks. From 64 B. C. until the Arab conquest in 636 A. D., it was part of the Roman Empire. The Arabs made it a trade center for their whole empire, but it suffered severely from the Mongol invasion in 1260, and fell to the Ottoman Turks in 1560. Syria remained a Turkish province until World War I.

A secret Anglo-French pact of 1916 put Syria in a French zone of influence. The League of Nations gave France a mandate over Syria, but the French had to enforce this with troops to put down several nationalist uprisings. In 1930, France recognized Syria as an independent republic, but still subject to the mandate. After nationalist demonstrations in 1939, the French high commissioner suspended the Syrian constitution, and then in 1941 British and Free French forces had to invade Syria to take it away from Vichy control. During the rest of World War II, Syria was an Allied base. Again in 1945, nationalist demonstrations broke into actual fighting and British troops were rushed in to reinforce the French garrisons. Later in 1946, after restoration of order, preparations were made to withdraw both British and French troops from Syria.

Present-day Syria has a one-house legislature popularly elected for four years by male citizens over twenty. The prime minister and cabinet exercise executive power; the president, elected by the legislature, serves a five-year term. Latakia in the northwest and Jebel Druze in the south are part of Syria but have considerable autonomy. The Syrian army is being organized around a cadre of special troops transferred from French to Syrian jurisdiction in August, 1945.

Primary education is compulsory. In 1938, Syria (including Lebanon) had 2,654 elementary schools with 279,598 pupils, 155

technical schools with 17,984 pupils, and 33 secondary schools with 1,584 pupils. There is a university at Damascus. Syria's division into mutually distrustful religions and sects is a seriously weakening factor. Most of the population is of Semitic origin and speaks Arabic, but there are wide variations of dialect among localities.

Agriculture and animal breeding are the main industries. Only half the land is arable, only a third is actually cultivated. Most crops require irrigation. In 1945 Syria (including Lebanon) grew 443,493 metric tons of wheat, 274,168 metric tons of barley, and millet, sorghum, lentils, chickpeas, beans, rice, sesame, olives, potatoes, onions, fruit, cotton and tobacco. A total of 400 tons of silk cocoons were produced in 1945.

Stock raising is important among the nomadic and seminomadic tribes. In 1943 there were 2,492,000 sheep, 1,583,000 goats, 54,000 camels, 490,000 cattle and 287,000 asses. Wool output averages about 3,000 tons a year.

Industry is small scale and confined to the manufacture of such consumer goods as flour, oil, soap, tobacco products, shoes and thread.

Exports from Syria (and Lebanon) in 1945 totaled £SL 43,842,000. Imports were £SL 130,624,000. Textiles, fruit, vegetables, tobacco and wool were leading exports; cloth, oil and foodstuffs were major imports.

Syria (and Lebanon) had in 1939 a total of 7,072 miles of highway, and 872 miles of railway, including a stretch of the Berlin-to-Baghdad line near Aleppo, and the Hejaz line south from Damascus.

The 1946 Syrian budget balanced at £SL 129,747,000, of which 25 percent was for defense, 15 percent for public works, and 9 percent for education.

Coastal Syria is a narrow plain. Back of that is a range of coastal mountains, and back of that is a steppe area. In the east is the Syrian Desert, and in the southeast next to Trans-Jordan is the Jebel Druse Range rising to heights of nearly 5,800 feet. The climate is subtropical, with rainfall averaging fifty inches on the coastal range but diminishing to less than four inches in parts of the desert.

Known minerals are few, although gypsum is widely distributed, and there are indications of phosphates, antimony, copper, lead, nickel and chrome. Building materials are plentiful.

Trans-Jordan (Kingdom)

Area: 34,740 square miles.

Population (est.): 400,000.

Density per square mile: 11.6.

Ruler: King Abdullah ibn Hussein.

Prime Minister: Ibrahim Hachem Pasha.

Principal city: Amman, 25,000 (capital).

Monetary unit: Palestinian pound.

Racial stock: Arab.

Language: Arabic.

Religions: Moslem (Sunni) except about 30,000 native Christians and 7,000 Circassians.

An ancient land, the size of Maine, what is now Trans-Jordan was known in the time of Moses as Edom and Moab. It passed to the Amorites of Damascus and in 106 B. C. became part of the Roman province of Arabia. In 636 A. D. it was conquered by the Arabs and a period of decline and depopulation and soil-erosion ensued.

Conquered by the British in World War I, Trans-Jordan was separated from the Palestine mandate in 1920, and placed in 1921 under the rule of Emir Abdullah. In 1923 Britain recognized Trans-Jordan's independence, subject to the mandate. In World War II Trans-Jordan cooperated completely with Britain. In March of 1941 it became a charter member of the Arab League. In March of 1946, Britain revoked the mandate and recognized full and complete independence of Trans-Jordan. On June 1, 1946, Emir Abdullah was proclaimed king.

The present ruler, King Abdullah ibn Hussein, was born in Mecca, 1882, the second son of the late King Hussein of the Hejaz and elder brother of the late King Feisal of Iraq.

Trans-Jordan is a constitutional monarchy. By reforms effected in 1939 the King rules with the aid of a cabinet of department heads responsible to him, and an elected Legislative Council of 20. Defense of the country is entrusted to the Arab Legion and the Trans-Jordan Frontier Force. An annex to the treaty of Mar. 22, 1946 specified that Britain should provide officers, financial assistance and arms and equipment for Trans-Jordan forces. Britain also reserved the right under the treaty to maintain troops in Trans-Jordan and there are several Royal Air Force bases.

The economic life is primitive; there are estimated to be 50,000 nomads and 120,000 seminomads. At least 95 percent of the total area is deserted. Illiteracy is widespread; in 1939 the 191 schools had 13,850 pupils.

Most of the country is suitable only for pasturing sheep, goats and camels. Cultivated land is limited to a relatively small area west of the Hejaz Railway. Crops include wheat, barley, tobacco, beans and peas, and in irrigated areas, vegetables and fruits—especially bananas and oranges. In the drier cultivated areas of the plateau, the inhabitants retain tribal organization and still live in tents. Foreign trade is limited to the exchange of wheat, fresh fruit, wool and live animals for sugar, tea, and other necessities.

Despite the sparse settlement of the country, it has good roads connecting the principal towns with Palestine, Syria and Iraq (total 1943: 1,400 miles). Of less importance is the Hejaz railroad running from north to south at the brink of the desert. The Cairo-Baghdad air route crosses the country from west to east.

The 1940-41 revenue was £P388,455 plus grants-in-aid from the British government of £P95,110 with expenditures of £P465,807 in the ordinary and £P44,766 in the extraordinary budget. The public debt in 1940 was £P155,107.

Trans-Jordan is mainly a plateau with an average altitude of 3,000 feet, sloping gently eastward. The western edge is a steep slope overlooking the Rift Valley (Jordan River, Dead Sea, and Wadi El Araba) 3,000-4,000 feet below. In the south are mountains over 5,000 feet high and a sandstone area cut by deep canyons. The subtropical steppe and desert has wet cold winters and dry hot summers. Rainfall near the escarpment decreases from about 26 inches in the north to 10 inches in the south, but averages under 5 inches in the desert to the east.

Deposits of iron, manganese, ochre and phosphates exist but building materials and salt from the Dead Sea are the only minerals worked commercially.

Turkey (Republic)

(Türkiye Cumhuriyeti)

Area: 296,500 square miles.

Population (census 1945): 18,871,000.

Density per square mile: 63.6.

President: Gen. İsmet İnönü.

Prime Minister: Recep Peker.

Principal cities (census 1945): İstanbul, 793,946 (chief port, commercial center); Smyrna (İzmir), 183,762 (seaport); Angora (Ankara), 157,242 (capital); Adana (Seyhan), 88,119 (agricultural center); Brusa, 77,598 (silk, carpets); Eskişehir, 60,742 (trading center).

Monetary unit: Turkish pound (£T).

Racial stock (1935, by place of birth): Turkish, 94.0%; Greek, 2.2%; Bulgarian, 1.4%; Yugoslavian, .9%; Others, 1.5%.

Language: See Racial stock.

Religions (1935): Mohammedan, 98.6%; Others, 1.4%.

HISTORY. The first appearance of the Ottoman Turks in history dates from the early 15th century. The first sultan of the Ottoman Turks was Othman or Osman (1288-1326) who proclaimed his independence in about 1299 from the Seljuk Turks, then in control of Asia Minor. Osman's son, Orkhan (1326-1359), who captured Gallipoli in 1355, organized the Janissaries, a force of mercenaries composed of captured Christian boys raised as Mohammedans. For 200 years after the rule of Orkhan,

each sultan kept adding to the conquests of his predecessors. In 1361 Adrianople was seized, and in 1364 Philippopolis was captured and Bulgaria became a vassal state. With the defeat of the Serbs at the battle of Kossovo (1389) the Turks became masters of the Balkan Peninsula. Although they were routed by Timur and his Mongol horde in 1420, they still added Macedonia and part of Greece to their possessions under the rule of Murad II (1421-1451). Finally, under Mohammed II the Conqueror, Turkish forces took Constantinople (1453) and brought an end to the Byzantine Empire. In 1517 Selim the Grim conquered Syria and Egypt. His successor, Solymon the Magnificent, took Budapest, laid siege to Vienna and brought the empire to the height of its power. Its boundaries now stretched from the Persian Gulf to the frontiers of Poland and from the shores of the Caspian Sea to Oran in western Algeria.

Turkey's decline began in 1571 when the Turkish navy was overwhelmed at Lepanto by the Holy League, formed by the union of Venice and Spain with the pope. In 1683 Turkish forces besieging Vienna were defeated by a Polish force led by John Sobieski and Budapest and Belgrade were lost. During the next 200 years Turkey in Europe became a pawn in the political maneuvers of the great European powers. In the 18th century Russia recovered the northern and eastern shores of the Black Sea and made herself the official protector of the Balkan Christians. Fear of a Russian drive on Constantinople prompted England and France to declare war on Russia, and the Crimean War (1854-56) followed. As a result of the Russian-Turkish war of 1877-78, Bulgaria became practically independent and Rumania threw off her nominal allegiance to the sultan. More substantial Turkish concessions were reversed by the Great Powers at the Congress of Berlin (1878). Further defeats were suffered by Turkey in the Italian and Balkan Wars (1911-13). Meanwhile, a revolt led by the Young Turks, an organization of young liberals, forced the abdication of Sultan Abdul Hamid and established a constitutional regime with accompanying reorganization of the government.

On August 2, 1914 a secret alliance was signed between Germany and Turkey whose army was advised by a German military mission and in September the allies declared war. Turkish forces successfully defended the strategic Dardanelles but British forces seized Egypt, Palestine, Mesopotamia and Syria, and the Hejaz revolted. By 1918 allied forces held the territory along the Dardanelles and the Bosphorus and later Greek forces occupied Smyrna and vicinity. In 1919 the new Nationalist party, headed by Mustapha Kemal was organized to resist the allied occupa-

tion, and in 1920 a National Assembly elected Mustapha Kemal president both of the assembly and of the government. The sultan's government continued to function in Constantinople. Under Mustapha Kemal's leadership, the Nationalist government was recognized by foreign powers, the Greeks were driven out of Smyrna and other allied forces were withdrawn. The present boundaries of Turkey (with the exception of Alexandretta) were fixed by the Treaty of Lausanne (1923) and later negotiations. The caliphate and sultanate were separated and the sultanate abolished on October 1, 1922. On October 29, 1923, Turkey formally became a republic with Mustapha Kemal, who took the name of Kemal Atatürk as its first president. He carried out an extensive program of reform, modernization, and industrialization.

The multilateral Montreux Convention (July 20, 1936) abrogated a number of provisions of the Treaty of Lausanne relating to the Straits, abolished the international commission established by that treaty to control the Straits and authorized Turkey to militarize the former demilitarized zone in the Straits zone. General Ismet İnönü was elected to succeed Kemal Atatürk on the latter's death in 1938. On October 19, 1939 Turkey concluded a mutual assistance pact with Britain and France. Turkey followed a chauvinistic neutral course during most of World War II but on August 2, 1944 she broke off relations with Germany and on January 3, 1945, with Japan. On February 23, 1945 she declared war on Germany and Japan.

GOVERNMENT. The Constitution, as amended in 1937, defines the Turkish state as "republican, nationalist, populist, étatist, secular, and revolutionary." The President of the Republic is chosen from the deputies of the National Assembly; his term of office is identical with the life of each Assembly. The 455 members of the Assembly are elected by universal suffrage for a term of four years. According to the Constitution, the Assembly exercises the executive power through the President and Council of Ministers (cabinet) appointed by him. It may at any time control the actions of the government and at any time dismiss it. The principal political party is the nationalistic Republican People's Party.

Turkey is divided for administrative purposes into 63 vilayets which are divided into kazas, subdivided in turn into nahiyes. Each vilayet has an elected council but centralization is the basis of the governmental system.

The pre-republic judicial system was based on the Sunni Moslem law which was religious in origin. Under the republic a new judicial system was organized and in 1926 a civil code was established, based

and modeled upon the present Swiss code. The judiciary system consists of (1) police or local justice courts; (2) district courts; (3) assize courts for serious criminal offenses; and (4) the court of cassation, which is the only court of appeal.

Military service is compulsory from 20 to 45; the initial training period is three years. The strength of the army on a mobilized basis is from 500,000 to 650,000. The army's pre-war equipment was largely obsolete, but large purchases of modern materials were made during World War II. The air force, under the direct control of the Turkish General Staff, had a strength of 370 first-line aircraft and personnel of about 8,500 in 1940. The navy (December 31, 1945) had 1 battle cruiser (the former German ship *Göben* launched in 1911), 2 outdated cruisers, 6 destroyers and larger torpedo boats, and 9 submarines.

SOCIAL AND ECONOMIC CONDITIONS. Elementary education is nominally obligatory from seven to sixteen. According to the census of 1935 only 2,517,878 of the population were literate in the Latin alphabet which replaced the Arabic script. Only 23.3 percent of the male population and 8.2 percent of the female population could read and write. In 1942 there were 11,413 schools with 769,555 male and 331,706 female students. There were twenty institutions of higher learning with 11,771 male and 3,099 women students, including the University of Istanbul, founded in 1900.

MAJOR AGRICULTURAL CROPS, 1940

Crop	Acres	Tons
Barley	12,342,590	2,529,770
Corn	1,172,585	700,900
Cotton	725,945	241,840
Olives	1,729,000*	13,220
Potatoes	1,793,220	241,400
Rye	2,897,310	699,960
Tobacco	202,540	72,750
Wheat	24,534,510	4,634,060

*1938.

Agriculture is the principal industry employing about 65 percent of the population according to the 1935 census. Only about 20 percent of the land is under cultivation, but the government has made great efforts to modernize and improve the industry. The most important crop is tobacco, with the best quality coming from the Pontic coast near Samsun and also from Bafra, Sinope and Trebizond. Cereals provide about 75 percent of the country's needs. Cotton is grown largely in the south of Asia Minor while figs come exclusively from the Smyrna region. Turkey is a leading exporter of olive oil; the Brusa region and the Ionian coast are the principal areas of cultivation. Opium poppies are

rown in the Smyrna, Malatia and Tokat regions.

Turkey is rich in livestock. The most important animal is the goat, of which there were 8,832,000 ordinary goats in 1942 besides the valuable Angora goat (3,703,000) which thrives on the uplands of the plateau. There were also 690,000 buffaloes, 7,888,000 cattle, 763,000 horses, 1,424,000 mules and asses and 17,211,000 sheep.

In 1936 Turkey had 65,245 industrial establishments employing 256,855 people. A five-year plan for the industrialization of the country was initiated in 1934 with the objective of making Turkey economically independent. Staple industries have been established in iron and steel, textiles, paper, glass, sugar and cement. The estimated annual output of the Karabuk iron and steel plant is 219,000 metric tons of pig iron, 150,000 of rolled steel products, and 171,900 of steel ingots.

Imports in 1943 amounted to £T 203,000,000 and exports, £T 247,000,000. Before World War II Turkey's chief supplier was Germany followed by the United States, Italy and Great Britain. The principal exports (1940) were tobacco (leaf) 21.7 percent, cotton 7.4 percent, hazelnuts 5.9 percent, sultanas 4.1 percent, and mohair 5.9 percent. The major imports were mineral oils 15.3 percent, machinery and parts 12.9 percent, iron and steel manufactures 8.7 percent, paper and paper products 5.4 percent, and chemicals 4.9 percent.

In 1942 Turkey had a merchant fleet of 168 vessels with a gross tonnage of 187,556. Coastwise trade is restricted to Turkish vessels. The republic has pushed the development of a good railway system in Asiatic Turkey. The total length of railways at the end of 1943 was 4,609 miles, of which 4,339 miles were owned by the state. Highway mileage (1939) totaled 25,656, of which 10,370 were improved.

Revenue (1944-45) was estimated in £T 570,435,500 and expenditure at £T 570,434,417. On May 31, 1939 (the last published figures) the public debt amounted to £T 619,385,681 of which £T 331,761,471 represented the consolidated debt. After 1939 numerous loans to meet extraordinary expenditures, mostly for defense, swelled the public debt considerably.

NATURAL FEATURES. Turkey is divided into two natural divisions by the historic waterway formed by the Hellespont, the Sea of Marmora and the Bosphorus. Turkey in Europe comprises an area about equal to the state of Massachusetts. It is hilly country drained by the Maritsa River and its tributaries. On the west it is covered by forest and very thinly inhabited but on the east near the Maritsa there is fertile land. Almost all its population is found in and near its two important towns, Istanbul (Constantinople) and Adrianople. Turkey

in Asia, or Anatolia, is roughly a rectangle in shape with its short sides on the east and west. Its center is a treeless plateau, bordered on all sides by a rim of mountains which on the seacoasts drop steeply to a wooded plain some 75 miles wide. On the land frontiers the belt of forest clothes the foothills of the Taurus Mountains and the Armenian highlands.

Turkey has great variety in climates. Along the coast from Antioch to the Dardanelles the climate is Mediterranean, with rainy winters and dry summers. Thence to the Bosphorus it is transitional to the Pontic type of climate, which has heavy year-round rainfall. Semitropical fruits and tea may be grown in the region beyond Trebizond. The western plateau has a harsh steppe climate, with cold winters, hot summers and scanty rainfall while the eastern plateau exhibits a transition from steppe to alpine climate.

Turkey's rich mineral resources are comparatively unexploited, although a five-year plan initiated in 1936 had their development as its objective. Deposits of copper in the large field at Arghana, near Diarbekir on the Iraq-Syrian frontier, have been estimated at 1,600,000 tons (1942 output: 12,278 tons). Turkey is relatively rich in coal with large deposits in the Ereğli region on the Pontic coast some 150 miles from Istanbul (1942 output: 2,509,614 metric tons). A virtual world monopoly is enjoyed in meerschaum, found in the Eskişehir district; 1942 output was 369 cases. Other important minerals, with 1942 output in metric tons, include chrome (130,053); manganese ore (3,313); emery (10,325); and antimony (1,449).

Nearly 9 percent of the total area of Turkey in Asia is forest land, covering 25,419 square miles. A large proportion of Eastern Thrace is also under forest, covering 1,648 square miles. Pines are 37 percent of the total and oaks 14 percent. The forest law of 1937 provides for state control of all forests.

The fisheries constitute an important contribution to the wealth of the country. The passage through the Bosphorus gives opportunities for fishing in the narrow and controlled waters which are of great value.

Union of Soviet Socialist Republics

Area (est.): 8,412,345 square miles* (8,173,550 in 1938).

Population (est.): 195,152,000* (170,467,186 by 1939 census).

Density per square mile: 23.2.

Chairman of Praesidium of Supreme Soviet: Nikolai Shvernik.

Premier: Generalissimo Joseph Vissarionovich Stalin.

Principal cities (census 1939): Moscow, 4,137,018 (capital); Leningrad, 3,191,304 (industrial center, shipbuilding); Kiev, 846,293 (industrial center, Ukraine); Kharkov, 833,432 (iron and steel, coal); Baku, 809,347 (oil center, Azerbaijan); Gorky, 644,166 (iron and steel); Odessa, 604,223 (chief Black Sea port); Tashkent, 585,005 (textiles, tobacco, Uzbek S. S. R.); Tiflis, 519,175 (capital of Georgian S. S. R.); Rostov on Don, 510,253 (grain, shipbuilding).

Monetary unit: Rouble.

Racial stock (1939): Great Russian, 58.4%; Ukrainian, 16.6%; Byelorussian, 3.1%; Uzbek, 2.9%; Tartars, 2.5%; Armenian, Azerbaijani, Georgian (each 1.3%); over 100 others.

Languages: See Racial Stock.

Religions: Russian Orthodox (predominant), Mohammedan, Roman Catholic, Jewish, Lutheran.

*Including 1945 acquisitions.

HISTORY. The recorded history of Russia begins with the perhaps legendary figure of the Viking Rurik, who according to tradition came to Russia in the 9th century and founded the first Russian dynasty at Novgorod. The various tribes were united by the spread of Christianity in the 11th century; Vladimir, "the Saint," adopted the Greek Catholic faith in 988 A. D. During the 11th century the grand dukes of Kiev held such centralizing power as existed. In 1240 Kiev was destroyed by the Mongols and the Russian territory was split into numerous smaller dukedoms, out of which three large centers emerged—Galicia, Moscow and Novgorod. The early dukes of Moscow extended their dominions through their office of tribute collector for the Mongols. In the late 15th century Ivan III, the reigning duke, acquired the rival kingdoms of Novgorod and Tver and threw off the Mongol yoke. Ivan IV, the Terrible (1533-1598), first Muscovite duke to assume the title of Tsar, is considered to have founded the Russian State. He crushed the power of rival princes and boyars (great landowners), but Russia remained largely mediaeval until the reign of Peter the Great (1683-1725), the grandson of the first Romanov tsar, Michael (1613-1645). Peter effected extensive reforms aimed at Westernization and through his defeat of Charles XII (1709) of Sweden, he extended Russian boundaries to the west. Catherine the Great (1729-1796) continued Peter's Westernization program and also expanded Russian territory, acquiring the Crimea and part of Poland. During the reign of Alexander I (1801-25), Napoleon's attempt to subdue Russia was defeated (1812-13) and new territory was gained, including Finland (1809) and Bessarabia (1812). Alexander was the originator of the Holy Alliance which crushed for a time the rising tide of liberalism in Europe. Between the Napoleonic Wars and World War I a few reforms were introduced, but the autocratic power of the Tsars remained unchanged.

During the reign of Alexander II (1855-1881), Russia's borders were pushed to the Pacific and into central Asia. Serfdom was abolished in 1861, but heavy restrictions were imposed on the emancipated serfs. Revolutionary strikes following Russia's defeat in the war with Japan forced Tsar Nicholas II (1894-1917) to grant a representative national body (Duma), elected by narrowly limited suffrage; it met for the first time May 10, 1906. Nicholas continued in his reactionary course, however, and the actions of the overwhelmingly liberal Duma had little or no effect on the government.

World War I demonstrated the corruption and inefficiency of the czarist regime, although the call of patriotism held the poorly equipped army together for a time. Disorders broke out in Petrograd in March, 1917, and, following the winning over of the Petrograd garrison (March 11), the revolution was in full sway. Tsar Nicholas was forced to abdicate under pressure from the Duma, and a provisional government was formed, composed of both conservative and radical elements. This government under the successive premierships of Prince Lvov (March 12) and Alexander Kerensky (August 6), a Menshevik or moderate socialist, soon lost ground to the radical or Bolshevik wing of the Socialist Democratic Labor Party. Finally, on Nov. 7, 1917, came the Second Revolution, engineered by Nikolai Lenin and Leon Trotsky. Their small but well disciplined Bolsheviks following in the Petrograd Soviet and the government was turned over the next day to the Congress of Soviets (councils of soldiers, peasants and workers), which vested the government in a Council of People's Commissars with Lenin as premier and Trotsky as foreign minister. The humiliating Treaty of Brest-Litovsk (March 3, 1918) concluded the war with Germany, but civil war and intervention by foreign powers prevented the new Communist Government from gaining control of all of Russia until 1920.

On July 1, 1923 the vast territory under Soviet rule—previously an inchoate mass whose constituent parts were changing constantly—became the Union of Soviet Socialist Republics, formed by the union of the R. S. F. S. R. and the Ukrainian, Byelorussian and Transcaucasian S. S. R's. The sudden death of Lenin (Jan. 21, 1924) precipitated an intraparty struggle between the group led by Joseph Stalin, general secretary of the party, and the opposition led by Trotsky which favored not only swifter socialization at home but fomentation of revolution abroad. In 1927, Trotsky and other opposition leaders were expelled from the party and exiled. The first Five-Year Plan (1928-32) called for gradual progressive increase in industrial and agricultural production. Its collectivization

program was opposed by the Kulaks, or wealthier peasants, but they were vigorously suppressed. Purges carried out in 1936, 1937 and 1938 removed several prominent leaders of the Revolution as well as high-ranking Army officers.

Soviet foreign policy—first featured by friendship with Germany, and antagonism toward England and France and then (1933) by participation in the League of Nations and an anti-Fascist program—took an abrupt turn on Aug. 24, 1939, with the signing of a Soviet-German nonaggression pact. Territory seized from Poland (Sept. 1939) became part of the Ukrainian and Byelorussian S. S. R.'s; that secured from Finland at the conclusion of the Finnish war, part of the Karelian S. S. R. set up March 31, 1940; that secured from Rumania (Bessarabia and northern Bukovina) part of the Moldavian S. S. R. set up August 1, 1940; and finally the formerly independent states of Estonia, Latvia and Lithuania occupied in June, 1940, were admitted into the U. S. S. R. as the 14th, 15th and 16th Soviet Republics.

Immediately following the German attack (June 22, 1941), all necessary powers for the defense of the state were vested in the State Defense Council headed by Stalin, who had taken over the post of premier on May 6. The Germans quickly seized about 500,000 square miles of Soviet territory, occupying about 10 percent of the Union itself, but the Soviet forces resisted stubbornly, aided by increasing amounts of materiel from the United States and Britain. The great Soviet counteroffensive in the Stalingrad area (Nov. 1942-Feb. 1943) marked the turning point and Soviet troops gradually pushed the Nazis back, with the final stage, the great offensive, begun on January 12, 1945. The nonaggression pact with Japan (1941) was denounced in April 1945, and, following the declaration of war on Japan (Aug. 8, 1945), Soviet Far Eastern forces quickly occupied Manchuria, Karafuto and the Kuriles. With the end of the war the fourth Five-Year Plan was launched in September 1945, with emphasis on the expansion of heavy industry.

GOVERNMENT. Under the Constitution adopted December 5, 1936, the Soviet Union "is a Socialist State of Workers and Peasants" whose highest organ is the Supreme Soviet of the Union which exercises supreme legislative authority. The latter consists of two equal Houses—the Soviet of Nationalities in which each constituent republic has 25 representatives, each autonomous republic 11, each autonomous oblast five, and each national okrug one, and the Soviet of the Union elected on a nationwide basis with one representative for each 300,000 inhabitants. All representatives are elected for four-year terms; the last election was held on February 10, 1946.

Elections amount to a blanket endorsement (or rejection) of a single list of candidates already nominated by the Communist party, youth organizations, collective farms and trade unions. The only election in the Western sense of the word takes place in the selection of the nominees by these groups. All citizens over the age of 18 are enfranchised. The Praesidium of the Supreme Soviet acts as an executive body between the sessions of the Supreme Soviet. It has a chairman (sometimes referred to as the Soviet President), 16 vice chairmen (one for each constituent republic), a secretary and 24 members, all elected by the Supreme Soviet.

The highest executive and administrative power is exercised by the Council of Ministers (formerly People's Commissars) appointed by the Supreme Soviet and headed by a Chairman (premier) and eight vice chairmen. It issues decrees and executive orders on the basis of laws in operation and supervises their execution. The administrative machinery is necessarily vast and complicated, since it is not only responsible for the ordinary administrative functions of government, but also for the operation of State-owned enterprises.

LOCAL GOVERNMENT. The territorial administrative structure is extremely complex. The All-Union organization is paralleled in each of the constituent republics which has its own constitution, its own Supreme Soviet (unicameral), Praesidium, and such ministers as are required for its own affairs. By an amendment adopted on February 1, 1944, each republic is given the right to have separate ministries for defense and foreign affairs, formerly All-Union responsibilities. The constituent Republics are subdivided into autonomous S. S. R.'s, also with Supreme Soviets and Councils of Ministers, regions (*oblast*), territories (*kraj*) and autonomous regions, which are governed by elected executive committees. There are also district, city and village Soviets. The basic administrative unit is the *raion*—roughly comparable to a U. S. county.

JUDICIARY. The highest judicial organ is the Supreme Court of the U. S. S. R., elected by the Supreme Soviet. Supreme Courts of the Union and Autonomous Republics are elected by their respective Supreme Soviets and those of the regional and territorial courts by their respective Soviets. The All-Union Attorney-General, elected by the Supreme Soviet, appoints the prosecutors of the Union and Autonomous Republics and supervises their activities. The Military Collegium of the All-Union Supreme Court exercises original jurisdiction in cases involving the security of the State.

COMMUNIST PARTY. The only political party permitted to exist in the Soviet Union is the All-Union Communist Party

(Bolshevik), which now has over 6,000,000 members. Its organization parallels the entire governmental and economic structure of the country and guides all important action through instructions from the central organs of the Party to Party members who occupy most of the important political and economic positions. Its highest organ is the All-Union Party Congress, which meets irregularly. The Congress elects a Central Committee (71 members, 68 alternates), which in turn elects (1) an executive body (Politburo) with nine members and five alternates, (2) an organizational bureau (Orgburo), which manages the Party, (3) a secretariat composed of five of the Orgburo members, headed by a general secretary (Stalin), and (4) a Committee of Party Control with 31 members.

DEFENSE. Generalissimo Stalin is supreme commander in chief of the Soviet armed forces and Minister of Defense. He is assisted by six deputy ministers. The Red Army, Red Fleet and the air force have separate staffs and commanders operating under his general supervision. Military service is compulsory; the initial training period varies from two to five years. The armed forces, which were estimated to have reached a peak of 15,000,000 in mid-1945, had been reduced to over 5,000,000 men in late August 1946, according to official U. S. sources. This figure included about 3,250,000 in the Red Army, 750,000 in the air force, 500,000 in the N. K. V. D. (secret police organization with paramilitary formations), and 500,000 in the Red Fleet. The latter two still maintained their wartime strength. Over 2,000,000 men were estimated to be outside Soviet borders and about 700,000 in the Soviet Far East (i.e. full wartime strength including Soviet troops in Manchuria and Korea). The air force was believed to have about 20,000 first-line craft. Information about the Red Fleet is as vague as that about the army and air force. It was believed (June, 1946) that it included five battleships (including ex-*H.M.S. Royal Sovereign*), 10 cruisers (including ex-*U.S.S. Milwaukee* and ex-German ship *Nürnberg*), over 100 submarines, more than 50 destroyers, and considerable flotillas of coastal and river craft, patrol vessels, mine sweepers and other ancillary craft. At least one 16-inch-gun battleship (*Treti International*) and one 22,000 ton aircraft carrier (*Krasnaya Znamya*) were nearing completion, and an extensive construction program under the aegis of the fourth Five-Year Plan was in progress.

SOCIAL AND ECONOMIC CONDITIONS.
EDUCATION. The school system throughout the country is based upon uniform text books and the same syllabus, although a number of hours is allowed for native language, literature and history in the non-Russian schools. All schools are State

controlled and compulsory education begins at the age of seven. Coeducation is being abolished and separate schools established for boys and girls. The boys' curriculum stresses military training; the girls' curriculum, housework. Under the Defense Ministry are the newly established Suvorov military schools, residential military schools for the training of future officers. In the academic year 1945-46, 772 colleges and institutions of higher learning were functioning with a student body of 560,000. Literacy was estimated at 81 percent in 1940.

RACIAL STOCK AND POPULATION. According to the Soviet census of 1939, urban and rural workers formed 32.1 percent of the population, urban and rural employees (mainly the white-collar group) 17.5 percent, collective farmers 44.8 percent, and individual peasants 1.7 percent. There are almost 200 different ethnic groups; in 1940 newspapers were published in 70 different languages, and books in 11 different languages.

AGRICULTURE. From a predominantly agricultural country, the Soviet Union has grown in the last 25 years into an industrial-agricultural power, with agriculture making great advances at the same time. The total area under cultivation was 105,000,000 hectares in 1913, 118,000,000 hectares in 1929, and 157,000,000 hectares in 1941.

AREA SOWN TO PRINCIPAL CROPS, 1929, 1938, 1940

(in millions of hectares)

Crop	1929	1938	1940
Grain	96.0	102.5	110.0
Industrial plants	8.8	10.9	11.0
Vegetables, melons and potatoes	7.6	9.4	10.0
Fodder	4.9	14.1	18.0

SELECTED PRODUCTION DATA, 1913, 1929, 1937

(in millions of tons)

Crop	1913	1929	1937
Wheat	26.2	18.8	46.0
Raw cotton	.7	.8	2.0
Flax (average for 5 preceding years)	.2	.4	1.0
Sugar beets	10.9	6.2	21.0
Potatoes	23.3	45.6	65.0

STATISTICS ON ANIMAL INDUSTRY

(millions of head)

Animal	1916	1933	1938
Horses (all)	35.8	16.6	17.0
Cattle	60.6	38.4	63.0
Sheep and goats	121.2	50.2	102.0
Pigs	20.9	12.1	30.0

In 1938 there were 242,400 collective farms (*Kolkhoz*), 3,961 State farms (*Sovkhoz*), 1,300,000 individual farm owners, and 6,358 tractor stations (MTS).

The Union's diverse climate permits the growing of the most varied crops, ranging from the temperate to the subtropical. Production of beet sugar (short tons) in 1940 was 2,365,000; tea, 14,220; raw silk 1,900; (1938) oats, 18,728,000; rye, 23,071,000; barley, 9,039,000; maize, 2,965,000; rice, 349,000; wool, 151,000; citrus fruit, 16,094.

INDUSTRY. Almost all industry in the Soviet Union is carried on by organizations owned or controlled by the State. About 80 percent of the total State industries is controlled by 291 large trusts. The industrialization of the country has been one of the major objectives of its leaders during the past 25 years. The successful completion of the two Five-Year Plans (1928-1932; 1933-37) and of most of the Third (1937-42) saw an amazing increase in the volume and versatility of Soviet industry. The following table reveals the growth of some of the principal industries, expressed in the value of annual production based on prices prevailing in 1926-27.

VALUE OF ANNUAL PRODUCTION OF SOME PRINCIPAL INDUSTRIES

(in millions of rubles)

Industry	1913	1933	1938
Electric light and power	45	855	2,262
Coal	301	839	1,518
Ferrous metallurgy	755	1,616	4,023
Metal working industries	1,446	11,283	33,613
Chemical	457	2,301	6,809
Textile	3,519	6,049	11,255

On January 1, 1936, there were 574,064 industrial enterprises and the value of the output of industry in 1938 was \$9,160,992,-300. Production figures (1938) included 687,000,000 pairs of shoes, 919,428 tons of paper, 161,432 tons of raw textiles, and 4,304,574,065 yards of finished textiles.

The large-scale evacuation of plants to the East and the construction of new plants there during World War II, coupled with the eastward orientation of industry prior to the war, has shifted the balance to newly developed regions in Central Asia and Siberia from the Moscow-Leningrad area and the Ukraine. The Ural region is now the center of Soviet industrial power, accounting for almost all magnesium and aluminum production and over 60 percent of the pig iron and steel production. It includes the great Magnitogorsk, Novo-Tagil, and Orsk Metallurgical Combines, the Chelyabinsk tractor plant, and the Uralvagonzavod and Uralmashzavod machine-building plants. The production of con-

sumers goods continues to be subordinate to the production of heavy capital equipment.

TRADE. Soviet foreign trade is a State monopoly and foreign goods are purchased in accordance with an over-all plan conducted under the supervision of the Foreign Trade Ministry. Connected with the Ministry are a number of export, import, export-import and transport combines through which foreign trade transactions are usually effected.

The U. S. S. R. share in world exports (1938) was 1.1 percent; imports, 1.2 percent. Exports (1938) totaled \$115,000,000, of which 28.2 percent went to the United Kingdom, 8.8 percent to Belgium, 7.3 percent to the U. S., 7.0 percent to the Netherlands, and 6.6 percent to Germany. Imports totaled \$122,780,000, of which 28.5 percent came from the U. S., 16.9 percent from the United Kingdom, 7.2 percent from the Netherlands, 4.8 percent from China and 4.7 percent from Germany. Principal exports were grain 21.9 percent, lumber and timber 16.8 percent, furs 9.9 percent, petroleum and products 7.9 percent, and cotton goods and threads 4.5 percent. Imports included machines and industrial equipment 26.8 percent, iron and steel 10.3 percent, wool 5.3 percent, electrical machines and parts 4.2 percent, and live animals 3.7 percent. From June 22, 1941 until 1945 large supplies were received from Britain and Canada, and after October 1, 1941, from the United States.

LEND-LEASE AID TO THE U. S. S. R., 1941-1945

Source: Twenty-second Report of the President to Congress on Lend-Lease Operations, June 14, 1946.

Category	U. S. dollars
Ammunition	481,953,000
Ordnance	301,795,000
Aircraft	1,189,200,000
Aircraft engines, parts, etc.	375,168,000
Tanks and ordnance vehicles	618,129,000
Motor vehicles and parts	1,150,806,000
Watercraft	689,205,000
Foods	1,726,023,000
Other agricultural products	28,885,000
Machinery	1,576,674,000
Metals	878,996,000
Petroleum products	134,160,000
Other supplies	1,314,248,000
Rental of ships, etc.	473,819,000
Servicing, repair of ships, etc.	120,442,000
Miscellaneous expenses	81,967,000
Total	11,141,470,000

COMMUNICATIONS. The Soviet merchant fleet (*Sovtorgflot*) aggregated about 1,200,000 deadweight tons (Mar. 31, 1946) exclusive of about 400,000 tons received as the Soviet share of the German merchant marine. Merchant ship construction has

been subordinated to naval construction under the fourth Five-Year Plan. U. S.-owned tonnage operated by the U. S. S. R. under lend-lease amounted to 613,950. The principal ports include Leningrad on the Baltic, Murmansk and Archangel on the Barents and White Seas, respectively; Vladivostok on the Sea of Japan; and the Black Sea ports of Odessa, Sevastopol, Novorossiysk and Batum. River and canal transport is extremely important. In 1939 there were 68,310 miles of navigable inland waterways, and 130,410 additional miles suitable for raft and timber. The former include the Volga, Don, Kama and Dnieper wholly within European Russia, and the great rivers of Siberia—the Ob, Yenisei, Lena and Amur. Cargo carried (1938) totaled 73,303,000 tons.

Railway mileage (1938) totaled 51,887, of which about 30 percent was double-tracked. Freight traffic reached 516,300,000 tons and passengers carried, 1,777,800,000 in 1938. Highway mileage (1938) totaled 831,330, of which 29,808 were paved and 24,506 improved gravel roads.

Air traffic is assuming great importance, especially in the central Asiatic portion of the U. S. S. R. Prior to World War II, the network of air routes covered 58,125 miles. In 1945 operations of the Civil Air Fleet tripled those for 1940. Moscow is connected with the capitals of all the Union republics by daily air service, and there are regular services to the Far East and Europe. No foreign air routes have been allowed to enter the U. S. S. R. At the end of 1938 there were 1,461,500 miles of telegraph-telephone wire, 1,272,500 telephones, and 83 radio stations.

FINANCE. Estimates for the 1944 budget balanced at 245,600,000,000 rubles. War expenditure (1944) was estimated at 128,400,000,000 rubles. The Soviet budget includes charges for the financing of industry, transportation, agriculture and commerce—items which ordinarily are handled through private channels in other countries. The internal debt (1939) amounts to \$2,667,369,471.

NATURAL FEATURES AND RESOURCES. TOPOGRAPHY. With almost three times the area of continental United States, the U. S. S. R. is the largest unbroken political unit in the world, occupying more than one-seventh of the land surface of the globe. The greater part of its territory is a vast plain stretching from eastern Europe to the Pacific Ocean. This plain, relieved only occasionally by low mountain ranges (notably the Urals), consists of three zones running east and west: (1) the frozen marshy tundra of the Arctic; (2) the more temperate forest belt; and (3) the steppes or prairies to the south, which in southern Soviet Asia become sandy deserts. The topography is more varied in the South, particularly in the Caucasus between the

Caspian and Black Seas, and in Tien-Shan-Pamir mountain system bordering Afghanistan, Sinkiang and Mongolia. Mountains (Stanovoi) and great rivers (Amur, Yenisei, Lena) also break up the sweep of the plain in Siberia.

CLIMATE. The climate necessarily is varied, but for the most part is continental. In general the climate of the northern and central regions is characterized by long, cold winters and by summers which are shorter and cooler than those in the northern part of the United States. In the southern regions the climate varies between temperate and subtropical. The Uzbeks, Turkmen and Kazakh S. S. R.'s are largely desert and semi-desert areas. In the central belt rainfall is fairly uniform, averaging about 15 inches east of the Urals and 20 inches to the west. In the tundra to the north it drops to about eight inches, and to four inches in the southern regions.

MINERALS. The U. S. S. R. is probably the richest country in the world in mineral resources—containing deposits of almost every known mineral. It ranks fourth in coal production, second or third in pig iron and gold, second in iron ore, third in petroleum, first in platinum, and retains a high rank in the production of numerous other minerals. The richest mineral region is that of the Ural Mountains, which lacks only good coking coal. Other production figures (1940) included aluminum, 160,893,800 pounds; copper, 183,202 tons; gold, 4,250,000 ounces; (1939) lead, 82,673 tons; platinum, 100,000 ounces; (1938) silver, 8,040,000 ounces; tin, 14,330 tons; zinc, 77,161 tons. Petroleum production (1938) was 206,125,000 barrels. Production is centered in the Baku area and at Krasnodor (Maykop) and Grozny in the northern Caucasus; the latter two fields suffered severe war damage.

MINERAL PRODUCTION DATA

(millions of tons)

Product	1913	1933	1938
Coal	29.1	76.3	132.4
Peat	1.7	13.8	26.3
Iron ore	9.2	14.5	26.3
Manganese ore	1.2	1.0	2.1
Pig Iron	4.2	7.1	14.1
Steel	4.2	6.9	18.1

FORESTS. With a forested area of about 3,500,000 square miles, the U. S. S. R. possesses a large proportion of the world's timber reserves. Most of the forested area is in Siberia, but there are also valuable stands in the Caucasus. Production of wood and timber (1934) amounted to 3,519,152,145 cubic feet.

FISHERIES, FURS. The numerous rivers, lakes and surrounding seas (except the Black Sea) are rich in fish; the catch averages over 1,000,000 tons. The acquisition of

former Japanese fisheries in southern Sakhalin, the Kuriles, and Kamchatka will double the output of the Far Eastern fish industry. Trapping is an important secondary industry, especially in eastern Siberia. Furs valued at \$11,386,000 were exported in 1938.

Uruguay (Republic)

(República Oriental del Uruguay)

Area: 72,172 square miles.
Population (est. 1943): 2,202,936.
Density per square mile: 30.28.
President: Tomás Berreta.
Principal cities (est. 1943): Montevideo, 708,123 (capital); Paysandú, 46,000 (meat packing); Salto, 46,000 (cattle raising); Minas, 32,000 (farming center).
Monetary unit: Peso.
Racial stock (est.): White, 86%; Mestizo, 12%; Indian, 2%.
Language: Spanish.
Religion: Roman Catholic.

Uruguay, a country a little larger than North Dakota, has many distinctions. It is the smallest and most densely populated of South American nations. It has one of the highest proportions of white population and one of the lowest illiteracy rates in all Latin America. Despite constant pressure from big Argentina, and some concessions to the powerful neighbor, Uruguay has managed to remain one of the most democratic and progressive of Latin American states.

Juan Díaz de Solís, a Spaniard, discovered Uruguay in 1516, but the Portuguese were first to settle it when they founded Colonia in 1680. After a long struggle, Spain wrested the country from Portugal in 1778. Uruguay revolted against Spain in 1811, only to be conquered by 1820 by the Portuguese from Brazil. Independence was re-asserted with Argentine help and the republic was set up in 1830. There followed a long period of factional strife between two groups still in existence—the Blancos and the Colorados—which dealt in plot and intrigue and bred only financial ruin and political folly. President José Batlle y Ordóñez launched a series of social reforms in 1911-15 which started Uruguay off on its modern career of democracy, although Dr. Gabriel Terra, elected president in 1931, grabbed dictatorial power and modified the constitution to permit reelection.

He was succeeded in 1938 by General Alfredo Baldomir and, in 1943, by Juan José de Amézaga, both of whom worked closely with the United States on global and hemispheric policy. In 1946, Tomás Berreta was elected president. One of Uruguay's backward steps came in July of 1946 when press censorship was decreed, making it an

offense to write in Uruguay anything deemed damaging to a neighbor nation.

Under the 1936 constitution, Uruguay elects every four years a president, vice president, a cabinet and a two-house congress—a 99-member Chamber of Deputies and a 30-member Senate. The president and vice president may not succeed themselves, and the cabinet and congress are chosen by proportional representation. All literate citizens vote, including women who also may sit in congress. For administration, the country divides into nineteen departments. Congress elects the Supreme Court judges.

Service in the army—1940 strength was 8,093—is voluntary, but national guard service is compulsory in war-time. There is a police force of about 5,500, and an air force that had 463 men and forty-five planes in 1939. The navy had a 1,150-ton sloop, a surveying vessel, and several smaller craft on Jan. 1, 1946.

Uruguay's illiteracy rate is 35 percent; primary education is compulsory and all education is free. There were in 1942, a total of 22,833 pupils enrolled in 1,768 primary schools, 27,000 in ninety-eight secondary schools, and 2,670 in the one university at Montevideo. Uruguay's high percentage of white population includes many foreign-born, mostly Italian and Spanish, but some Brazilian, Argentine and French.

Cattle, sheep, meat and wool dominate Uruguayan economy. With nearly 80 percent of its grassy land devoted to grazing, there were in 1942 a total of 22,000,000 sheep, and in 1937, a total of 8,296,890 cattle, 644,200 horses and 6,091,842 fowls. The 1942 wool output was 52,880 tons. With only about 5 percent of land cultivated, a third of this grows wheat, the chief crop—238,000 tons in 1943-44. Other crops are corn, flax for linseed, oats, potatoes, beans, fruits, tobacco, alfalfa and grapes. From its grapes, Uruguay makes 70,000,000 liters of wine a year.

Uruguay slaughters more than a million head of cattle and sheep a year, and meat processing is the largest manufacturing industry. There are many modern plants for chilling or freezing meat, and plants for preparation of liquid extract of beef. The last industrial census in 1936 showed a total of 11,470 industrial plants, with 90,128 workers, and capital of about 250,000,000 pesos.

During World War II Uruguay doubled its foreign trade and most of the increase went to the United States. In 1944 imports were \$72,446,471 against exports of \$97,558,653, adding millions more to Uruguay's favorable trade balance that was estimated at \$150,000,000 in 1946.

In value, wool is the export leader, about 40 percent of the total, followed by canned

meat, frozen beef and hides. Chief imports are oil, gasoline, sugar, iron and steel. In addition to the United States, Uruguay trades extensively with Britain, Brazil and Argentina. In 1946 Argentina sought to put political pressure on Uruguay by cutting off its wheat and salt.

Steamers of fourteen-foot draft can travel halfway up the country's Uruguay River border, and smaller craft can go nearly the length of that border. The Rio Negro is navigable only in its lower course. Railway mileage in 1945 totaled 1,800, of which 90 percent was British owned. Highway mileage was 8,514. Air service is supplied by Pan American and three other lines, one domestic. In 1942 Uruguay had 57,882 telephones, the second highest rate per capita in Latin America.

The 1944 budget put revenue at 136,894,503 pesos and expenses at 136,900,000 pesos, and deficit financing continued for the sixth straight year. The 1944 public debt was 571,602,285 pesos. The 1941 national income of 480,000,000 pesos gave Uruguay the fourth highest per capita income in Latin America. U. S. investments in 1942 were \$10,918,000; British, 44,085,608 pounds.

Uruguay, a low, rolling plain in the south and a low plateau in the north, has a 120-mile Atlantic shore line, a 235-mile-frontage on the Rio de La Plata, and 220 miles on the Uruguay River, its western boundary. The climate is good. Average summer temperature in January and February is 71 degrees, and average winter temperature in July is 50 degrees. Frost is almost unknown. Average rainfall is 35 inches, heaviest in the autumn.

Minerals are of slight importance. In the north some gold is mined—1,608 ozs. in 1939; and there are small deposits of silver, lead, copper, talc and lignite coal. The forest products, including quebracho, urunday and guayabo, do not even meet local needs.

Venezuela (Republic)

(Estados Unidos de Venezuela)

Area: 352,143 square miles.

Population (census 1941): 3,850,771.

Density per square mile: 10.9.

President: Rómulo Betancourt.

Principal cities (census 1941): Caracas, 269,030 (capital); Maracaibo, 112,519 (oil); Valencia, 53,938 (farming center); Barquisimeto, 54,176 (coffee, sugar, mining).

Monetary unit: Bolívar.

Racial stock (est. 1938): Mestizo, 65%; White, 20%; Negro, 8%; Indian, 7%.

Language: Spanish.

Religion: Roman Catholic.

Venezuela, a third larger than Texas, has a stormy political past and the dis-

tingtion of being the world's second or third greatest producer of oil, outranked only by the United States and possibly by Russia. In South America it is the sixth largest country in size, the only country lying entirely north of the equator, the second most illiterate country, and the birthplace of Simon Bolívar who led the liberation of much of the continent from Spain.

Columbus discovered Venezuela on his third voyage in 1498 and for reasons of his own, a subsequent Spanish explorer gave the country its name, meaning "Little Venice." There were no important settlements until Caracas was founded in 1567. With Bolívar taking part, Venezuela was one of the first South American colonies to revolt against Spain in 1810, but it was not until 1821 that independence was won. Federated at first with Colombia and Ecuador, the country set up a republic in 1830, and then collapsed for many decades into a condition of revolt, plot, dictatorship and corruption climaxed by the iron-hand regime of Antonio Guzmán Blanco from 1870 to 1889. The United States intervened in 1895 to force Great Britain to arbitrate a dispute with Venezuela over the boundary with British Guiana. From 1908 to 1935 when he died, General Juan Vicente Gómez ruled tyrannically over the nation, picking various satellites to alternate with him in the presidential palace. During World War I Gómez maintained neutrality and he was succeeded in 1936 by General Eleazar López Contreras. The president during World War II, General Isaias Medina Angarita, cooperated with the United States but he permitted such political freedom that he was overthrown on Oct. 19, 1945.

Out of that revolt, militarist in nature, the Socialist leader Dr. Rómulo Betancourt became provisional president, and his government received U. S. recognition on Oct. 21, 1945. By the summer of 1946, the Betancourt regime was forced to guard the presidential palace against another desperate promise of revolution.

In its government, under a 1936 constitution, Venezuela is a federal union of twenty states, a federal district and two territories. Normally the president is elected every five years by the Congress composed of a 40-member Senate and an 85-member Chamber of Deputies, both directly elected. All males twenty-one and over have the vote. The president names the territorial governors but each of the nominally autonomous states has its own courts and a president chosen by a locally elected assembly. Federal Supreme Court judges are elected by Congress. Military service is compulsory with a three-year initial training period. In 1940 the army had 11,000 men and 7,500 reserves; the air force, 373 men and fourteen planes. The navy in 1940 had five gunboats, two armed

ugs, and one yacht. Four coast guard patrol vessels were received from the United States in 1944. Under a pact signed on June 3, 1946, a U. S. military mission was to advise the armed forces on modern tactics and equipment for two years.

Illiteracy in 1943 was estimated at 70 percent, second in South America only to Bolivia. Primary education between seven and fourteen is compulsory. School enrollment in 1944 exceeded 300,000 in 5,318 primary and 122 secondary schools. There are two universities—Los Andes at Merida, with 700 students, and Central University at Caracas, with 2,800 students.

About 80 percent of the population is rural. Venezuela has one of South America's highest birth rates, and increased its population more than 10 percent from 1936 to 1941.

The principal crop is coffee, grown on 60,000 plantations on the slopes of the coastal mountains. Production for 1944-45 was 950,000 bags, each of sixty kilograms. Exports of cocoa in 1944 were 15,869 metric tons, and other important crops are sugar, tobacco, cotton, corn, wheat and tropical fruits. Stockraising, centered east of Lake Maracaibo, is important. Estimates in 1945 showed 4,000,000 cattle, 750,000 calves, 60,000 sheep and lambs, and 1,400,000 goats and kids. Cattle hide production in 1944 was 9,600 metric tons.

There are few industries, the most important being woodworking, cotton textiles and tobacco products. The most recent statistics, in 1936, listed 8,025 establishments with 46,855 workers, and a product value of \$51,945,858. Electric power is plentiful in Venezuela, and a new law in 1943 prepared the way for the beginning of an oil refining industry. Most Venezuelan oil always was shipped out of the country for refining.

Oil, most of which is found on the north-west shore of Lake Maracaibo, is everything in Venezuela. It accounts for 90 percent of exports, gives the country a big foreign trade balance and a treasury surplus. All exports in 1943 totaled 862,085,143 bolivars; imports, 222,059,810 bolivars. After oil, exports are gold, hides, livestock, coffee and cocoa. Chief imports are metals, metal products, machinery, food products, textiles and chemicals. Most Venezuelan oil goes to the United States, via Curaçao and Aruba, refining centers in the Dutch West Indies. About 35 percent of other exports are U. S. purchased. The United States supplies 85 percent of imports, with Britain second.

Highways include 3,750 miles for all weather use, and 1,600 miles of unimproved road. Railway mileage is about 685, in largely unconnected short lines, ten national and two British-owned. In 1945

Venezuela had thirty-eight airports serving Pan American, K.L.M., the government-owned Linea Aeropostal Venezolana, Aerovias Venezolanas, and the newly organized Linea Aerea TACA de Venezuela. Telephones in 1942 numbered 36,138. Vehicle registration in 1945 totaled 15,095 cars and 12,573 trucks. La Guaira and Puerto Cabello are the chief seaports. Navigable rivers total 6,500 miles. Most of the tonnage sent along the Orinoco—navigable for 700 miles for river steamers of twelve-foot draft—is trans-shipped at Port of Spain, Trinidad.

The proposed 1945-46 budget was 506,-311,173 bolivars. The treasury surplus in April, 1945, was 238,499,000 bolivars as against an internal debt of 25,000,000 bolivars. There is no foreign debt. Venezuela's excellent financial position is largely due to its revenue from taxes on oil and other minerals. British investments in 1944 were £18,325,447; American investments in 1942, \$262,376,000.

An unusual setting of mountain systems break Venezuela into four distinct areas. There is the Maracaibo lowland. There is the mountainous region in the north and northwest. There is the Orinoco basin with the llanos—vast grass covered plains—on its northern border and great forest areas in the south and southeast. And there is the Guiana highland, south of the Orinoco, accounting for nearly half of the national territory. About 80 percent of Venezuela is drained by the Orinoco and its 400 tributaries. All of the river's 1,500 miles lie in or on the Venezuelan border. The coast line, 1,876 miles long, is indented in the northwest by the Gulf of Maracaibo. A narrow channel joins the gulf to Lake Maracaibo which is nearly the size of Ontario.

The climate is tropical except where modified by altitude; it approaches the mild temperate in the higher western mountains. Most rainfall occurs between April and October, and the rest of the year is dry.

In addition to oil, Venezuela has gold mines in the region southwest of the Orinoco delta. Output in 1944 was 59,000 ounces. Of minor importance are bauxite, coal, copper, iron, tin, asbestos, and asphalt. Diamond production in 1944 was 59,000 carats.

Much of the country is covered by forests still barely exploited, particularly south of the Orinoco. Forest products include balata, cabinet woods, chicle, divi-divi (tannin), mangrove bark, medicinal plants, rubber, tonka beans and copaiba. One of the oldest industries is the pearl fisheries off Margarita, Coche and Cubagua islands, on the northern coast. Production in 1943 was 4,993,257 carats.

Yugoslavia (Republic)

Area (1945): 95,983 square miles.

Population (est. 1941): 16,261,125.

Density per square mile: 169.4.

Chairman of Praesidium of National Assembly:
Dr. Ivan Ribar.

Prime Minister: Marshal Josip Broz (Tito).

Principal cities (census 1931): Beograd (Belgrade), 241,542 (capital); Zagreb, 185,581 (Croat commercial center); Subotica, 100,058 (wheat; livestock); Sarajevo, 78,182 (Bosnian manufacturing center); Skopje, 64,807 (Serbian trading center).

Monetary unit: Dinar.

Racial stock (1931): Serbian, 46%; Croat, 28.5%; Slovene, 8.5%; German, 3.6%; Others (Magyar, Albanian, Rumanian, Czech), 14.3%.

Languages: See Racial stock.

Religions (1931): Serbian-Orthodox, 48.7%; Roman Catholic, 37.45%; Mohammedan, 11.2%; Protestant, 1.66%; Jewish, .49%; Greek Catholic, .32%; Others, .11%.

HISTORY. Yugoslavia, twice the size of Pennsylvania and fronting on the Adriatic Sea opposite Italy, was born in 1919, formed out of some of Europe's oldest trouble spots in the Balkans. After a brief and unstable history of twenty-five years, it emerged from World War II as a full-fledged Russian satellite—and still a trouble spot. The disposition of Trieste, claimed by Yugoslavia and Italy, was one of the big problems of the Paris Peace Conference in 1946. While the diplomats wrestled with that problem in Paris, Yugoslavia created an international incident by shooting down two unarmed American planes off course over her territory in August of 1946, and was stoutly defended by Russia for the act.

The 1919 components of Yugoslavia were the old kingdoms of Serbia and Montenegro, and the following: Bosnia-Herzegovina, formerly administered jointly by Austria and Hungary; Croatia-Slavonia, which had had limited autonomy under Hungary; and Slovenia and Dalmatia, formerly administered by Austria.

Alexander, son of King Peter I of Serbia, became the first king of the new country that grew out of World War I. He ascended the throne on Aug. 16, 1921, and his reign was a rocky one because the Croats, under Dr. Stephen Radic, unceasingly sought autonomy from the Serb king. Finally, a Croat assassinated Alexander in Marseille in October of 1934, and since his son Peter was a minor, a regency was set up under Prince Paul, the king's uncle.

After pursuing an increasingly pro-Axis policy under the regent, Yugoslavia signed the Axis Tri-Partite Pact on March 25, 1941, and thus caused the overthrow of the government two days later. On April 6 the country was invaded and occupied by the Nazis. While the king and government fled to London and government-in-exile,

Yugoslavia was divided into German, Italian, Hungarian and Bulgarian occupation zones. Puppet regimes were established in Croatia and Serbia.

Inside Yugoslavia, the Axis occupation was fought by two guerrilla armies—the Chetniks under Draja Mihajlovic, who supported the monarchy; and the Partisans under Marshal Tito (Josip Broz), who leaned toward Russia. These two groups fought not only the Germans, but also each other. In November of 1943, Tito established an Executive National Committee of Liberation to act as a provisional government, thus repudiating King Peter in exile.

In elections of Nov. 11, 1945, Tito's forces won overwhelmingly, partly because the monarchist factions boycotted the balloting. Convening on Nov. 29, the new Assembly abolished the monarchy and set up the Federal People's Republic of Yugoslavia. Tito was premier and his government won British and U. S. recognition on Dec. 22, 1945.

Meanwhile, pending settlement of the fate of Trieste and surrounding area in northwest Yugoslavia, allied troops maintained occupation there amid a strife-filled situation that often was tense.

GOVERNMENT. The constitution of Jan. 31, 1946, is derived from Moscow. There is a federal assembly with one representative for each 50,000 electors in the country. There is a house of nations in which the six federal units—Serbia, Croatia, Slavonia, Bosnia-Herzegovina, Macedonia and Montenegro—each have twenty-five representatives, while three other areas have a total of twenty-five. The praesidium, a joint committee of both houses, carries on when parliament is out of session. Actually, the master control is in the hands of Tito and the parliament is little more than a rubber stamp agency.

The present army, based upon the National Liberation Army and partisan detachments which at one time had a strength of about 800,000, is being reorganized and re-equipped along Soviet lines. Many of its higher officers are attending Red Army military schools. Its strength was unofficially estimated in July 1946, at 400,000 to 500,000 men. The navy was believed to include a destroyer, a submarine and two and a corvette on December 31, 1945.

SOCIAL AND ECONOMIC CONDITIONS. Education in 1940 on the elementary level was compulsory and free. In 1938 there were 8,727 elementary schools, with 1,393,422 pupils. In addition to many professional, industrial and agricultural schools, there were 119 high schools with 116,655 pupils and 22 training colleges for teachers with 3,199 pupils. The three universities

—Beograd, Zagreb, Ljubljana—had 16,207 students.

Agriculture occupies about 80 percent of the population and in 1939, 58.9 percent of the total area was under cultivation. The principal crops are corn, wheat, sugar beets, hemp and hops, opium (in Macedonia) and tobacco (chiefly in Macedonia and Herzegovina). Other important crops are beans, potatoes, flax, clover and lucerne. Excellent wines are produced in Dalmatia and Herzegovina and along the Danube in Serbia.

MAJOR AGRICULTURAL CROPS, 1939

Crop	Acres	Tons
Corn	6,622,070	4,459,465
Wheat	5,441,410	3,169,774
Barley	1,027,520	467,596
Oats	881,790	383,931
Rye	637,260	268,410
Vines	550,765	855,385

The fruit industry is important, especially in Serbia and Bosnia. In an average year some 750,000 tons of red plums are produced and 40,000 to 50,000 tons of dried plums are exported. In 1939 there were 8 sugar factories. In 1939 there were 12,224,595 cattle, 1,235,359 horses, 10,153,798 sheep and 3,503,454 swine.

Manufactures are limited for the most part to consumer goods. In 1938 there were 3,054 industrial establishments of which 884 were agricultural and food, 480 wood and paper, 399 textiles, 369 building and 234 electrical.

Yugoslavia has only limited access to ports on the Adriatic because of the difficulty in crossing the coastal range with railways and highways. Waterways, especially the Danube which is navigable for 318 miles in Yugoslavia, are important. In 1939, 3,335,500 tons of cargo were carried on inland waterways. There were in 1939 a total of 490 craft and many barges engaged in river transportation. The merchant marine in 1939 numbered 190 vessels of 411,384 gross tons. Wartime losses were about 202,000 tons. Railway mileage (1939) totaled 6,655 miles, mostly state owned. Highway mileage was 26,183, largely unimproved.

Exports in 1939 totaled \$125,419,000, of which 32 percent went to Germany, and imports were \$108,069,000, of which 48 percent came from Germany. Major exports were lumber, wood products, live animals, copper ore, wheat, meat, hemp, eggs, corn, tobacco and fruit. Major imports were textiles, iron and steel products, coal, vehicles and machinery.

Revenue in 1939 was \$281,428,524; expenditures, \$268,366,824. The national debt was \$559,257,920, and the gold reserve was \$45,386,568.

NATURAL FEATURES AND RESOURCES.

About half of Yugoslavia is mountainous. In the north, the Dinaric Alps rise abruptly from the sea and progress eastward as a barren limestone plateau called the Karst. Montenegro is a jumbled mass of mountains, containing also some grassy slopes and fertile river valleys. Southern Serbia, too, is mountainous. In the north and northeast, a rich plain drained by the Danube is the most fertile area of the country.

The Danube and tributaries—the Drava, Sava and Morava—in the northeast are the principal rivers. On the Adriatic, Yugoslavia's climate is mild Mediterranean, but in the interior the winters are cold and the summers hot.

Yugoslavia is the Balkans' principal mineral producer. Production in 1939 was: copper ore, in copper content, 70,768 tons; chromite, 65,617; bauxite ore, 351,457; lead ore, 76,059; iron ore, 735,031; zinc, 4,519; coal, 489,421; and lignite, 6,197,131. Also, silver, 2,293,634 ounces; gold, 33,662 ounces; and antimony, 7,356,750 pounds. Several of the larger mines are foreign-owned. Many rushing mountain streams make a high hydroelectric potential, and this has been developed frequently in connection with mining.

Forests cover about 30 percent of the country, with beech, fir and oak the most common trees. The annual cut, important for export, is about 530,000,000 cubic feet. Teslic has Europe's largest wood-distilling plant, making acetone, alcohol, methylated spirits and formaldehyde. Fishing is of some importance, especially among the coastal islands.

Important changes in various countries may have occurred too late to be included in the foregoing section. Some events that have occurred may be found in the 1946 Chronology.

LEADING COUNTRIES OF THE WORLD IN VARIOUS RICHES AND NATURAL RESOURCES

(Footnotes at end of chart)

MINERAL PRODUCTION (Figures approximate)	Country and rank									
	1	2	3	4	5	6	7	8	9	10
COAL (Millions of short tons, 1943)	U. S. 651	Germany ¹ 474	United Kingdom 218	U. S. S. R. 145	France 45	Poland ² 42	Czechoslovakia ² 34	India 29	Belgium 26	Australasia 23
CRUDE PETROLEUM (Millions of bbls., 1943)	U. S. 1,503	U. S. S. R. 201	Venezuela 178	Iran 74	Rumania 37	Mexico 35	Iraq 27	Argentina 25	Trinidad 21	Netherlands East Indies 20
COPPER (Thousands of short tons, 1944)	U. S. 973	Chile 538	Canada 274	Northern Rhodesia 248	Belgian Congo 180	U. S. S. R. ³ 173	Mexico 46	Peru 36	Japan No data	Yugoslavia No data
BAUXITE (Thousands of short tons, 1944)	U. S. 3,163	British Guiana 1,023	Hungary 880	France 734	Surinam 690	U. S. S. R. 440	Netherlands East Indies 220	Gold Coast 120	Italy 110	Yugoslavia 55
IRON ORE (Millions of short tons, 1941)	U. S. 104	U. S. S. R. 25	Great Britain 21	Germany 20	Sweden 16	France 12	India 4	Australia 3	Luxembourg 3	Spain 2
TIN (Thousands of short tons, 1944)	Bolivia 44	Belgian Congo 17	Nigeria 14	Malaya 11	Siam 6	Netherlands East Indies 6	China 3	Australia 3	Portugal 2	Great Britain 1
GOLD (Thousands of fine ounces, 1943)	South Africa 12,800	Canada 3,651	South America 1,442	U. S. 1,381	Australia 751	Southern Rhodesia 657	Mexico 632	Gold Coast 565	Belgian Congo 453	India 252
SILVER (Millions of fine ounces, 1943)	Mexico 77	U. S. 41	Canada 17	Peru 15	Australia 9	Bolivia 7	Belgian Congo 3	Honduras 3	Argentina ⁴ 3	South Africa 1
SULPHUR (Thousands of long tons, 1938)	U. S. 2,393	Italy 374	Japan ⁵ 138	Chile 21	Netherlands East Indies 16	Turkey 4	Bolivia 2	Peru 2	Palestine 1	Spain 1
CHROMITE (Thousands of short tons, 1943)	Cuba 390	U. S. S. R. 358	Southern Rhodesia 294	Turkey 217	South Africa 180	U. S. 160	Yugoslavia 72	Philippines 66	New Caledonia 55	India 37

SALT (Thousands of metric tons, 1938)	U. S. 7,281	Germany 3,280	China ⁴ 3,000	United Kingdom 2,680	France 1,610	India 1,564	Italy 1,499	Brazil 788	Poland 643	U. S. S. R. No data
LEAD (Thousands of short tons, 1943)	U. S. 470	Australia 300	Mexico 234	Canada 225	Germany 183	U. S. S. R. 140	Belgium 22	Burma 6	France No data	Italy No data
ZINC (Thousands of short tons, 1943)	U. S. 942	Germany 276	Canada 207	Poland 138	U. S. S. R. 132	Australia 81	Great Britain 72	Japan ⁷ 72	Belgium 33	Spain 21
URANIUM ⁸										
AGRICULTURE, FISHING, AND FORESTRY (Figures approximate)										
CULTIVATED LAND (Millions of acres, latest data available)	U. S. S. R. 590.6	U. S. ⁹ 334.9	British India 292.4	Argentina ⁹ 64.8	Canada ⁹ 59.9	Brazil ⁹ 33.6	Australia ⁹ 32.3	Algeria 15.8	Union of South Africa 14.5	Mexico ⁹ 12.6
MILK PRODUCTION (Billions of pounds, 1938)	U. S. 107.3	U. S. S. R. 63.6	Germany 59.9	France 31.1	Canada 15.8	England and Wales 13.4	Australia 12.0	Denmark 11.9	Netherlands 11.3	New Zealand 9.8
BUTTER PRODUCTION (Millions of pounds, 1938)	U. S. 1,786.5	Germany 1,118.6	France 458.1	U. S. S. R. 436.0	Australia 430.2	Denmark 417.6	Canada 372.2	New Zealand 370.4	Netherlands 232.7	Sweden 196.7
CHEESE PRODUCTION (Millions of pounds, 1938)	U. S. 682.2	Germany 498.3	France ³ 494.1	Italy 491.5	Netherlands 275.4	New Zealand 196.0	Canada 122.4	Switzerland 116.0	United Kingdom 97.0	Argentina 94.2
MEAT PRODUCTION (Millions of pounds, 1938)	U. S. 16,489.4	Germany 8,105.9	U. S. S. R. 7,281.8	Argentina 4,506.2	France 3,639.4	Great Britain ⁵ 2,998.6	Brazil 2,383.8	Australia 2,127.2	Poland ³ 1,764.0	Canada 1,403.0
CATTLE PRODUCTION (Number in thousands, 1938)	British India 205,192	U. S. 65,249	U. S. S. R. 63,200	Brazil 40,076	Argentina 34,318	Germany ¹⁰ 20,504	China 20,000	Mexico 16,117	France 15,805	Australia 13,078
HORSES (Number in thousands, 1938)	U. S. S. R. 17,500	U. S. 10,815	Argentina ³ 8,371	Brazil ¹¹ 6,052	China ¹¹ 4,080	Poland 3,916	Germany 3,689	Canada 2,821	France 2,691	Rumania ³ 2,065
HIDES AND SKINS, EXPORTS OF, 1938 (In thousands of U. S. dollars)	Argentina 31,388	India 15,757	Australia 15,392	France 15,219	Brazil 12,118	Uruguay 6,464	Union of South Africa 6,200	United Kingdom 5,418	Sweden 4,201	Canada 2,951

Leading Countries of the World in Various Riches and Natural Resources—(cont.)

AGRICULTURE, FISHING, AND FORESTRY (Figures approximate)	Country and rank									
	1	2	3	4	5	6	7	8	9	10
LEATHER MANUFACTURES, 1938 (In thousands of U. S. dollars)	U. S. 1,389,514	United Kingdom ¹¹ 168,426	Sweden ¹ 54,871	Argentina 42,920	Canada 28,905	India ¹² 26,545	Denmark 24,567	Poland 22,858	Rumania 16,064	Greece 9,137
HIDES AND SKINS TANNED, 1940 (All types, in thousands)	U. S. 108,620	United Kingdom 37,346	Germany 32,133	France 28,910	....	....	....	....	....	....
SWINE, NUMBER OF, 1938 (In thousands)	China 63,000	U. S. 44,525	U. S. S. R. 30,600	Brazil 24,075	Germany ¹⁰ 23,847	Poland 7,525	France 7,117	United Kingdom 4,383	Philippines 3,430	Argentina 3,381
SHEEP, NUMBER OF, 1938 (In thousands)	Australia 113,373	U. S. S. R. 84,500	U. S. 51,210	Argentina 45,917	India 42,047	Union of South Africa 39,188	New Zealand 31,897	United Kingdom 26,775	Uruguay 17,931	Turkey 17,760
WOOL PRODUCTION (1940, millions of pounds)	Australia 1,142	Argentina 474	U. S. 436	New Zealand 332	U. S. S. R. 330	British South Africa 293	Uruguay 139	United Kingdom 109	China ¹⁴ 90	India 80
COTTON PRODUCTION (Thousands of bales, 1940)	U. S. ¹⁵ 12,566	India 5,090	U. S. S. R. 3,000	Brazil 2,506	China ¹⁴ 2,354	Egypt 1,900	Peru 383	Mexico 302	Uganda 272	Anglo-Egyptian Sudan 247
RAW SILK PRODUCTION (Millions of pounds, 1939)	Japan 108,186	China ¹⁶ 89,608	Italy 6,177	U. S. S. R. 4,663	Korea 3,582	Greece 450	Bulgaria 344	Turkey 331	Iran 309	Syria and Lebanon 280
HEMP PRODUCTION (Thousands of pounds, 1938)	U. S. S. R. 264,552	Italy 257,938	Yugoslavia 122,135	Rumania 66,799	Manchuria 38,360	Korea 35,273	Hungary 30,203	Poland 28,219	Germany ¹⁷ 26,014	Japan 19,621
WOOD EXPORTS (Thousands of U. S. dollars, 1938)	Canada 66,895	U. S. 40,460	Finland 39,863	Poland 38,229	Sweden 31,994	Norway 31,114	Czechoslovakia 21,098	U. S. S. R. 19,361	Rumania 18,068	Japan 13,340
CHEMICAL PULP PRODUCTION (Thousands of short tons, 1938)	U. S. 4,596	Sweden 2,620	Finland 1,621	Germany 1,469	Canada 1,147	Japan 643	U. S. S. R. 600	Norway 502	Austria 300	Czechoslovakia 280
WHEAT PRODUCTION (Thousands of bushels, 1942)	U. S. 974,176	U. S. S. R. ¹⁸ 860,448	China ⁷ 720,000	Canada 556,684	India 374,715	France ¹⁹ 292,568	Italy 262,801	Argentina 235,157	Germany ^{3,17} 165,082	Australia 155,727

CORN PRODUCTION (Thousands of bushels, 1940)	U. S. 2,462,320	Argentina 403,048	China ¹⁹ 272,516	Rumania 211,890	Brazil 200,335	Yugoslavia 172,439	Italy 135,004	Manchuria 110,230	U. S. S. R. ³ 96,071	Union of South Africa 86,893
POTATO PRODUCTION (Thousands of bushels, 1939)	U. S. S. R. 2,175,000	Germany ²⁰ 2,067,902	France 560,000	U. S. 363,159	Czechoslovakia ²¹ 289,000	United Kingdom 194,232	Spain 155,884	Belgium 122,105	Netherlands 112,081	Eire 111,232
RICE PRODUCTION (Thousands of bushels)	China ²² 2,327,000	India ²² 1,894,759	Japan ^{22,23} 577,434	Burma ²⁴ 393,763	French-Indo-China ²⁵ 316,038	British Malaya ²⁵ 306,930	Korea ²² 226,326	Siam ²⁶ 213,079	Philippines ²⁴ 104,171	Brazil ²⁴ 67,735
BET SUGAR PRODUCTION 1940 (Thousands of short tons, in terms of raw sugar)	Germany 3,086	U. S. S. R. 2,884	U. S. 1,897	Czechoslovakia 740	Italy 669	Poland ² 602	Great Britain ¹ 591	France 519	Sweden 331	Netherlands 325
CANE SUGAR PRODUCTION 1940 (Thousands of short tons, in terms of raw sugar)	India ²⁷ 6,704	Cuba 2,734	Java 1,898	Brazil 1,362	Japan ²³ 1,294	Philippine Islands 1,148	Hawaii 947	Puerto Rico 932	Australia 904	Union of South Africa 573
RUBBER EXPORTS, 1938 (in thousands of pounds)	British Malaya 1,180,281	Netherlands East Indies 667,711	Indo-China 127,918	Ceylon 114,628	Brazil 22,589	British No. Borneo 21,306	British India 16,855	Nigeria ²⁸ 7,023	French Cameroon 3,175	Belgian Congo 2,544
WINE PRODUCTION, 1938 (in thousands of American wine gallons)	France 1,520,085	Italy 1,252,545	Algeria 587,737	Spain 420,000	Portugal 287,568	Argentina 243,120	Greece 106,181	Chile 94,342	Germany ²⁹ 87,045	U. S. 70,665
COFFEE PRODUCTION 1938-1939 (in thousands of pounds)	Brazil 3,095,479	Colombia 584,219	Netherlands East Indies 236,554	Salvador 148,812	Mexico 120,812	Guatemala 119,048	Venezuela 85,979	Cuba 72,090	Madagascar 65,036	Haiti ¹² 64,595
TEA PRODUCTION, 1937 (in thousands of pounds)	India 430,243	Ceylon ¹² 213,133	Netherlands East Indies 164,278	Japan 108,847	China 89,633	Taiwan 28,864	Indo-China 24,290	U. S. S. R. Transcaucasia 14,991	Nyasaland 14,462	Kenya 11,023
TOBACCO PRODUCTION 1940 (in millions of pounds)	U. S. 1,462	China 1,131	India 1,068	U. S. S. R. ² 596	Japan 192	Java and Madura ¹ 185	Turkey 149	Burma 136	Bulgaria 110	Greece 118
SEA PRODUCTS, VALUE OF, 1938 (in thousands of U. S. dollars)	Japan 88,052	United Kingdom 78,715	U. S. 72,347	Spain 68,356	France 46,805	Alaska 42,870	Germany ⁵ 41,256	Canada 40,258	Norway 34,700	U. S. S. R. ³⁰ No data
COPRA, NET EXPORTS, 1939 (in millions of pounds)	Philippines 1,465	Netherlands East Indies 1,201	Ceylon 343	British Malaya 295	New Guinea 164	Mozambique 77	French Settlements 51	Solomon Islands 50	British Borneo 28	Zanzibar 25

Leading Countries of the World in Various Riches and Natural Resources—(cont.)

AGRICULTURE, FISHING, AND FORESTRY (Figures approximate)	Country and rank									
	1	2	3	4	5	6	7	8	9	10
VEGETABLE OIL EXPORTS OF CERTAIN COUNTRIES, 1938 (Value in thousands of U. S. dollars) ³¹	Netherlands East Indies 36,132	French Indo-China 18,965	Philippine Islands 10,732	China 9,817	Italy 9,658	Manchuria 5,333	Greece 5,197	Ceylon 5,144	Nigeria 4,798	Belgian Congo 4,200
LINSEED PRODUCTION, 1938 (Millions of pounds)	Argentina 3,108	U. S. S. R. 1,653	India 1,033	U. S. 457	Uruguay 275	Poland 151	Canada 71	Lithuania 65	Germany 17 52	Latvia 47
CITRUS FRUIT PRODUCTION (1937-1938, in millions of pounds)	U. S. 8,888	Brazil ⁵ 2,570	Spain ³² 2,118	Italy 1,522	Japan 1,058	Palestine ¹² 864	Egypt 539	Mexico ⁵ 368	Union of South Africa 245	Australia 211
COMMERCE AND INDUSTRY										
STEEL, ESTIMATED PRODUCTION OF, 1943 (Millions of short tons)	U. S. 88.84	Germany 30.43	Great Britain 14.6	U. S. S. R. 13.4	Japan 9.9	Canada 3.0	France 2.51	Czechoslovakia 1.91	Belgium 1.88	Luxembourg 1.8
ALUMINUM, EST. PRODUCTION OF, 1944 (Thousands of short tons)	U. S. 776.4	Canada 461.0	Germany 330.0	Japan 143.0	U. S. S. R. 78.0	Great Britain 40.0	France 28.7	Italy 22.0	Norway 16.5	Switzerland 5.5
RAYON FILAMENT YARN PRODUCTION, 1939 (Thousands of pounds)	U. S. 331,200	Japan 239,350	Germany 160,000	Great Britain 120,000	Italy 119,000	France 56,200	....	....	....	....
RAYON STAPLE FIBER PRODUCTION, 1939 (Thousands of pounds)	Germany 440,000	Japan 309,500	Italy 191,000	Great Britain 60,000	U. S. 53,000	France No data	....	....	....	....
ELECTRICITY, AGGREGATE PRODUCTION OF 1935 (Million kwh)	U. S. 117,000	Germany 36,209	Canada 25,007	Japan 24,892	U. S. S. R. 18,499	United Kingdom 18,142	France 15,817	Norway 8,005	Sweden 6,892	Switzerland 5,644
CHEMICAL MANUFACTURES, TOTAL VALUE OF, 1939 (in millions of U. S. dollars) ³³	U. S. 3,733.7	Japan ² 984.7	United Kingdom ¹¹ 953.7	Canada 153.2	Chile 85.8	Korea ⁵ 80.2	Denmark 75.0	Poland ³³ 70.3	Rumania ³³ 65.5	Argentina 60.2
MANUFACTURES, TOTAL VALUE OF, 1939 (in millions of U. S. dollars) ³⁴	U. S. 56,828.8	United Kingdom ¹¹ 13,907.3	U. S. S. R. 9,160.9	Japan 5,595.5	Canada 3,336.4	Sweden 1,955.7	Argentina 1,526.6	Chile 1,267.2	Australia 765.4	Union of South Africa 760.5

EXPORTS OF PRINCIPAL EXPORTING COUNTRIES, 1939 (in millions of U. S. dollars)	Belgium ³⁹ 3,651.9	U. S. 3,123.3	Germany ² 2,111.4	United Kingdom 1,949.5	Japan 928.5	France ² 880.3	Canada ² 832.7	Italy 544.5	India 542.2	Netherlands 515.3
IMPORTS OF PRINCIPAL IMPORTING COUNTRIES, 1939 (in millions of U. S. dollars)	United Kingdom 3,927.6	Belgium ³⁵ 3,318.2	U. S. 2,276.1	Germany ² 2,188.7	France ² 1,323.4	Netherlands 808.9	Japan 757.5	Canada ² 673.5	Sweden 599.5	Italy 519.3
TELEPHONES PER 100 INHABITANTS, 1939	U. S. 15.9	Sweden 13.6	New Zealand 13.3	Canada 12.4	Denmark 12.0	Switzerland 11.0	Australia 9.5	Norway 8.5	United Kingdom 7.0	Germany 5.2
RADIO SETS PER 100 INHABITANTS, 1939	U. S. 34.6	Germany 23.0	Sweden 20.2	New Zealand 19.5	United Kingdom 18.8	Denmark 18.6	Australia 16.2	Norway 14.4	France 12.4	Switzerland 11.9
MOTOR VEHICLES PER 100 INHABITANTS, 1939	U. S. 25.0	New Zealand 16.7	Canada 12.5	Australia 11.1	United Kingdom 5.6	Union of South Africa 4.2	Sweden 3.4	Norway 3.1	Belgium 2.9	Germany 2.4
RAILROAD MILEAGE OF CERTAIN COUNTRIES, 1939	U. S. 248,040	Germany ³⁶ 86,000	U. S. S. R. ² 51,887	Canada 42,637	India 41,134	Australia 27,999	Argentina 26,564	France ² 26,427	Brazil 20,864	United Kingdom ² 20,797
AIR TRANSPORT SERVICES, 1938 (Millions of miles flown)	U. S. 81.0	U. S. S. R. ³⁷ 11.8	United Kingdom 14.3	Germany 13.9	Canada 10.9	Australia 9.7	France 9.0	Italy 8.4	Netherlands 6.5	Japan 3.3
HUMAN RESOURCES										
HIGHEST ANNUAL BIRTH RATES, 1939 (Per 1000 inhabitants)	Egypt ² 43.4	Mexico 40.4	Palestine 38.1	Venezuela 36.9	Chile 35.2	British India ² 34.1	Colombia ² 32.1	Rumania 28.3	Albania 27.7	Japan and Yugoslavia ² 26.7
LOWEST ANNUAL DEATH RATES, 1939 (Per 1000 inhabitants)	Netherlands 8.7	New Zealand ² 9.2	Union of South Africa 9.4	Canada 9.6	Australia 9.9	Norway 10.1	Denmark 10.1	Uruguay ² 10.2	U. S. 10.8	Argentina 11.4
LOWEST ANNUAL INFANT MORTALITY RATES, 1943 (Per 1000 live births)	Sweden 29	New Zealand (White) 31	Australia 36	Netherlands 40	U. S. 40	Switzerland 40	Denmark 45	Union of South Africa (White) 48	United Kingdom 52	Canada 54
MEN OF MILITARY AGE (Age groups 20-44 years, in thousands)	(1940) U. S. 25,378	(1939) U. S. S. R. 23,886	(1939) Germany 15,308	(1935) Japan 11,947	(1936) Italy 7,783	(1936) France 7,592	(1938) Poland 6,518	(1940) Gt. Brit. 6,329	(1940) Brazil 6,066	(1940) Mexico 3,247

Leading Countries of the World in Various Riches and Natural Resources—(cont.)

HUMAN RESOURCES	Country and rank									
	1	2	3	4	5	6	7	8	9	10
TOTAL NUMBER OF MEN IN CERTAIN COUNTRIES (Thousands of)	(1931) British India 180,206	(1939) U. S. S. R. 71,043	(1940) U. S. 66,062	(1939) Germany 38,762	(1935) Japan 34,734	(1936) Italy 21,068	(1940) Brazil 20,845	(1940) France 19,950	(1940) England and Wales 18,243	(1938) Poland 17,124
TOTAL NUMBER OF WOMEN IN CERTAIN COUNTRIES (Thousands of)	(1931) British India 169,554	(1939) U. S. S. R. 75,985	(1940) U. S. 65,608	(1939) Germany 40,614	(1935) Japan 34,520	(1936) Italy 21,815	(1940) Brazil 21,720	(1940) England and Wales 21,646	(1938) Poland 17,966	(1940) France 12,450
MILITARY FORCES (1940)										
STANDING ARMY	Germany 5,000,000	U. S. S. R. 4,600,000	France 4,000,000	United Kingdom 4,000,000	Italy 2,800,000	China 2,000,000	Japan 1,570,000	Rumania 800,000	Turkey 750,000	Yugoslavia 600,000
STANDING NAVY	U. S. ³⁸ 257,989	United Kingdom 250,000	Japan 107,000	France 82,500	Italy 75,000	Germany 50,000	U. S. S. R. 23,600	Spain 22,300	Argentina 15,500	Canada 15,000
STANDING AIR FORCE	Germany 1,000,000	Italy 265,340	United Kingdom 250,000	U. S. S. R. 150,000	U. S. 82,760	France 82,000	Japan 51,500	Canada 30,000	Rumania 15,472	Poland 9,350

¹1939.²1938.³1940.⁴1943.⁵1937.⁶1941.⁷Including Manchuria.⁸Deposits found in Belgian Congo, Canada, United States, U. S. S. R., Bulgaria, Czechoslovakia, Portugal, Sweden, Norway, England, and Spain; production data not available.⁹Exclusive of bare fallow.¹⁰Including Austria and the Saar.¹¹1935.¹²Exports only.¹³Includes wool exported on skins.¹⁴Includes Manchuria.¹⁵U. S. bales weigh 500 lb., gross and others 478 lb., net.¹⁶Exports only and excluding Manchuria.¹⁷Including Austria.¹⁸1930-39 average.¹⁹Includes Austria, Sudeftenland, and Memelland.²⁰Bohemia-Moravia and Slovakia.²¹1941-42 season.²²Including Taiwan (Formosa).²³1940-41 season.²⁴1936-39 average.²⁵1935-40 average.²⁶Includes gur, a low-grade sugar.²⁷Includes British Cameroons.²⁸Including Austria and Sudeftenland.²⁹Exported \$361,548 of black caviar in 1936.³⁰Does not include volatile oils.³¹No data available for France, Germany, U. S. S. R., Belgium, and Netherlands.³²1936.³³No data available for France and Germany.³⁴Including Luxembourg.³⁵"Greater" Germany.³⁶1934 (26,719 miles, total length of air routes, 1934: 65,865 miles, total length in 1938).³⁷Includes 18,708 Marines.

Highest Mountain Peaks of the World

Mountain Peak	Range	Location	Height, feet
Everest	Himalayas	Tibet-Nepal	29,002
Godwin Austen (K2)	Himalayas	India	28,250
Kanchenjunga	Himalayas	Nepal	28,146
Gurla Mandhata	Himalayas	Tibet	25,355
Tirich Mir	Hindu Kush	India	25,263
Muztagh Ata	Pamirs	Sinkiang	24,388
Minya Konka	.....	China	24,000
Chumalhari	Himalayas	Tibet	23,930
Muztagh	Kulun	Sinkiang	23,890
Trisul	Himalayas	India	23,360
Aconcagua	Andes	Argentina-Chile	23,080
Ojos del Salado	Andes	Argentina-Chile	22,402
Huascarán	Andes	Peru	22,180
Llulliaillaco	Andes	Argentina-Chile	22,145
Kailas	Himalayas	Tibet	22,028
Mercedario	Andes	Argentina	21,870
Incahuasi	Andes	Argentina-Chile	21,686
Tupungato	Andes	Argentina-Chile	21,490
Sajama	Andes	Bolivia	21,320
Chimborazo	Andes	Ecuador	20,702
Vilcanota	Andes	Peru	20,664
McKinley	Alaska	Alaska	20,300
Logan	St. Elias	Canada (Yukon Territory)	19,850
Cotopaxi	Andes	Ecuador	19,498
Kilimanjaro	.....	Tanganyika	19,319
Misti	Andes	Peru	19,200
Cayambe	Andes	Ecuador	19,062
Huila	Andes	Colombia	18,700
Demavend	Elburz	Iran	18,603
Elbrus	Caucasus	U.S.S.R.	18,564
Tolima	Andes	Colombia	18,438
Orizaba	Sierra Madre Oriental	Mexico	18,209
St. Elias	St. Elias	Alaska-Canada	18,008
Popocatepetl	Cordillera de Anáhuac	Mexico	17,888
Cerro de Cuzco	Andes	Bolivia	17,880
Sangay	Andes	Ecuador	17,470
Dikh-Tau	Caucasus	U.S.S.R.	17,085
Kenya	.....	Kenya (East Africa)	17,040
Foraker	Alaska	Alaska	17,000
Ixtacihuatl	Cordillera de Anáhuac	Mexico	16,960
Ruvenzori	.....	Belgian Congo	16,787
Kazbek	Caucasus	U.S.S.R.	16,547
Steele	St. Elias	Canada	16,439
Bona	St. Elias	Alaska	16,420
Blanc	Alps	France-Italy	15,781
Kluychevskaya	Kamchatka	U.S.S.R.	15,745
Pichincha	Andes	Ecuador	15,718
Wilhelmina	Orange	Netherlands New Guinea	15,580
Fairweather	St. Elias	Alaska	15,300
Rosa	Alps	Italy	15,196
Markham	.....	Antarctica	15,102
Hubbard	St. Elias	Alaska-Canada	14,950
Matterhorn	Alps	Switzerland	14,780
Karisimbi	.....	Belgian Congo	14,779
Ras Dashan	.....	Ethiopia	14,760
Malintzin	Cordillera de Anáhuac	Mexico	14,630
Sotará	Andes	Colombia	14,550
Whitney	Sierra Nevada	California	14,501
Elbert	Rockies	Colorado	14,431
Rainier	Cascades	Washington	14,408
Longs Peak	Rockies	Colorado	14,255
Colima	Sierra Madre Occidental	Mexico	14,238
Pikes Peak	Rockies	Colorado	14,110
Finsteraarhorn	Alps	Switzerland	14,026
Wrangell	St. Elias	Alaska	14,005

Highest Mountain Peaks of the World—(cont.)

Mountain Peak	Range	Location	Height, feet
Savalan	Elburz	Iran	14,000
Tajumulco	Sierra Madre	Guatemala	13,812
Gannett Peak	Rockies	Wyoming	13,785
Mauna Loa	.....	Hawaii	13,675
Jungfrau	Alps	Switzerland	13,667
Kinabalu	.....	British North Borneo	13,451
Monch	Alps	Switzerland	13,438
Cameroon	.....	Nigeria	13,349
Tacaná	Sierra Madre	Guatemala	13,335
Truchas	Rockies	New Mexico	13,300
Erebus	.....	Antarctica	13,202
South River Peak	Rockies	Colorado	13,145
Robson	Rockies	British Columbia	12,972
San Francisco	Rockies	Arizona	12,613
Fuji	.....	Japan	12,395
Cook	Southern Alps	South Island, New Zealand	12,342
Adams	Cascades	Washington	12,307
Pico de Teide	.....	Canary Islands	12,191
Semaru	.....	Java	12,057
Assiniboine	Rockies	British Columbia	11,870
Slamat	.....	Java	11,250
Hood	Cascades	Oregon	11,243
Pic de Aneto (Mala- detta)	Pyrenees	Spain	11,168
Pic des Posets	Pyrenees	Spain	11,047

Largest Islands of the World

Island and status	Location	Area, sq. mi.
GREENLAND (Danish colony, under United States protection)	North Atlantic	839,782
NEW GUINEA (Dutch colony, west part; British mandate, northeast part; Australian territory, southeast part)	Southwest Pacific	312,328
BORNEO (Dutch colony, south part; British protection, north part)	South China Sea	290,285
BAFFIN (Canada, Northwest Territory)	Arctic Ocean	236,000
MADAGASCAR (French colony)	Off east coast of Africa	229,438
SUMATRA (Dutch colony)	Indian Ocean	163,141
HONSHU (Japanese home island)	Sea of Japan	91,278
GREAT BRITAIN (England, Scotland, and Wales)	Off coast of northwest Europe	88,753
ELLESMERE (Canada, Northwest Territory)	Arctic Ocean	76,600
VICTORIA (Canada, Northwest Territory)	Arctic Ocean	74,000
CELEBES (Dutch colony)	Southwest Pacific	69,253
SOUTH ISLAND, NEW ZEALAND (British dominion)	South Pacific	58,120
JAVA (Dutch colony)	Indian Ocean	48,504
CUBA (Republic)	Caribbean Sea	44,164
NORTH ISLAND, NEW ZEALAND (British dominion)	South Pacific	44,131
NEWFOUNDLAND (British colony)	North Atlantic	42,734
LUZON	Philippine Islands	40,814
ICELAND (Republic)	North Atlantic	39,688
MINDANAO	Philippine Islands	36,900
HOKKAIDO (Japanese home island)	Sea of Japan	34,084
IRELAND (Eire, republic, south part; Northern Ireland, part of United Kingdom)	West of Great Britain	31,833
HISPANIOLA (Dominican Republic, east part; Haitian Republic, west part)	Caribbean Sea	28,242
TASMANIA (Australian state)	South of Australia	26,213
BANKS (Canada, Northwest Territory)	Arctic Ocean	25,992
CEYLON (British colony)	Indian Ocean	25,332
SAKHALIN (U. S. S. R.)	North of Japan	24,560

Island and status	Location	Area, sq. mi.
DEVON (Canada, Northwest Territory)	Arctic Ocean	20,484
TIERRA DEL FUEGO (Argentina, east part; Chile, west part)	Southern tip of South America	18,530
MELVILLE (Canada, Northwest Territory)	Arctic Ocean	16,164
SOUTHAMPTON (Canada, Northwest Territory)	Hudson Bay	16,114
KYUSHU (Japanese home island)	Sea of Japan	14,719
NEW BRITAIN (British mandate)	Southwest Pacific	14,500
PRINCE OF WALES (Canada, Northwest Territory)	Arctic Ocean	14,004
NOVAYA ZEMLYA (U. S. S. R.) (South Island)	Arctic Ocean	14,000
FORMOSA (Taiwan) (Chinese sovereignty)	East China Sea	13,857
TIMOR (Dutch colony, west part; Portuguese colony, east part)	Southwest Pacific	13,700
HAINAN (Chinese possession)	South China Sea	13,500
VANCOUVER (Canada)	Off coast of western Canada	12,408
SICILY (Italian department)	Mediterranean Sea	9,924
SOMERSET (Canada, Northwest Territory)	Arctic Ocean	9,540
SARDINIA (Sardegna) (Italian department)	Mediterranean Sea	9,298
FLORES (Dutch colony)	Southwest Pacific	8,870
SHIKOKU (Japanese home island)	Sea of Japan	7,246
CERAM (Serang) (Dutch colony)	Southwest Pacific	6,621
HALMAHERA (Jilolo) (Dutch colony)	Southwest Pacific	6,500
NEW CALEDONIA (French colony)	South Pacific	6,221
NORTH-EAST LAND (Spitzbergen) (Norwegian colony)	Arctic Ocean	6,000
SAMAR	Philippine Islands	5,124
NEGROS	Philippine Islands	4,903
JAMAICA (British colony)	Caribbean Sea	4,722
PALAWAN	Philippine Islands	4,500
PANAY	Philippine Islands	4,448
HAWAII (United States territory)	North Pacific	4,021
VITI LEVU (British colony in Fiji Islands)	South Pacific	4,011

Oceans and Seas

Name	Area, square miles	Average depth, feet	Greatest depth, feet	Place of greatest depth
Pacific Ocean	63,985,000	14,050	35,400	Off Mindanao, Philippines
Atlantic Ocean	31,529,000	12,880	30,246	Off Puerto Rico
Indian Ocean	28,357,000	13,000	22,968	Off Sumatra and Java
Antarctic Ocean	5,731,400	....	14,274	69° 20' S., 99° 45' W.
Arctic Ocean	5,541,000	3,955	17,850	77° 45' N., 175° W.
Mediterranean Sea (including Black Sea)	1,145,000	4,692	14,435	Off Cape Matapan, Greece
Bering Sea	878,000	4,716	13,422	Off Buldir Islands
Caribbean Sea	750,000	7,270	23,748	Off Cayman Islands
Gulf of Mexico	716,000	....	12,000	Sigsbee Deep
Okhotsk Sea	582,000	2,748	11,154	Off Kurile Islands
East China Sea	480,000	618	10,000	.....
Hudson Bay	472,000	420	600	Near entrance
Japan Sea	405,000	4,428	10,000	Central Basin
Andaman Sea	307,900	2,856	....	.....
North Sea	221,000	312	2,165	Skagerrak
Red Sea	178,000	1,614	7,254	Off Port Sudan
Black Sea	164,000	3,900	6,760	Near center
Baltic Sea	158,000	180	1,380	Off Gottland

The Great Barrier Reef lying off the northeast coast of Australia is the largest continuous mass of coral in the world. It extends 1,260 miles and is still growing.

The North Pole is not the coldest place in the Arctic Circle. For more than a

quarter of a century Europeans have lived in the coldest Arctic regions, which are the Yukon basin in Alaska, the Yukon Territory in Canada and the Siberian province of Yakutsk. Temperatures of 90° F. below zero have been recorded in Yakutsk.—*Encyc. Brit.*

PRINCIPAL RIVERS OF THE WORLD

River	Source	Course	Mouth	Approx. miles	Navigable length
Nile.....	Lake Victoria.....	North through Sudan and Egypt.....	Mediterranean Sea.....	4,000	2,900 miles at high water
Mississippi-Missouri.....	Source of Red Rock Creek, Montana.....	(See Mississippi and Missouri Rivers)	Gulf of Mexico.....	3,988	2,707 miles to Ft. Benton, Mont.
Amazon.....	Glacier-fed lakes in Peru.....	Through eastern Peru and east across Brazil.....	Atlantic Ocean.....	3,900	Iquitos, 2,300 miles, for ocean steamers, Actual Point, 2,700 miles, for vessels of 14-ft. draft
Yangtze.....	Tibetan plateau.....	East through central China.....	East China Sea.....	3,400	Vessels to 6,000 tons to Hankow at high water
Ob.....	Altai Mountains, U. S. S. R.....	Northwest in western Siberia.....	Arctic Ocean.....	3,200	Above confluence of Irtysh River
Amur.....	Confluence of Shilka (U. S. S. R.) and Argun (Manchuria) Rivers.....	Almost entire length of boundary between U. S. S. R. and Manchuria.....	Gulf of Tartar.....	2,900	Sretensk, over 2,000 miles, for small craft
Congo.....	Between Lakes Nyasa and Tanganyika.....	Through Northern Rhodesia, Belgian Congo, boundary between French Equatorial Africa and Belgian Congo in lower part.....	Atlantic Ocean.....	2,900	For large vessels 85 miles to Matadi
Lena.....	Baikal Mountains, U. S. S. R.....	East and north through eastern Siberia.....	Arctic Ocean.....	2,900	To Vitim
Yenisei.....	Tannu Ola Mountains, western Mongolia.....	North through Siberia.....	Arctic Ocean.....	2,800	Not used very much
Parana.....	Confluence of Paranaiba and Grande Rivers in southeast Brazil.....	Paraguay and Argentina.....	Rio de la Plata (Atlantic Ocean).....	2,800	For ocean vessels to Santa Fe, about 290 miles
Huang-Ho.....	East part of Kun-Lun Mountains in western China.....	Winding, generally east.....	Gulf of Pohai.....	2,700	Used locally
Mekong.....	Tibetan highlands.....	Through western China (Yunnan Province) and French Indo-China.....	China Sea.....	2,600	Used locally
Niger.....	Border of Sierra Leone.....	Through French West Africa and Nigeria.....	Gulf of Guinea.....	2,600	1,525 miles in 3 sections for native craft
Mackenzie.....	Head of Finlay River, British Columbia.....	East, then north through Great Slave Lake.....	Beaufort Sea (Arctic Ocean).....	2,500	1,200 miles to Ft. Smith on Slave River
Missouri.....	Actual headwaters Red Rock Creek. Beginning of Missouri at confluence of Gallatin, Madison and Jefferson Rivers.....	Through Montana, Dakotas, between Nebraska and Iowa, northeast corner of Missouri and across Missouri.....	Mississippi River.....	2,723 (headwaters) 2,475 (confluence)	1,442 miles to Ft. Benton, Montana
Mississippi.....	Lake Itasca, Minnesota.....	Through Minnesota; then forms east boundary of Iowa, Missouri, Arkansas, and part of Louisiana; and west boundary of part of Wisconsin, Illinois, Kentucky, Tennessee, and Mississippi East and south through European Russia.....	Gulf of Mexico.....	2,470	9-ft. channel to Minneapolis
Volga.....	Valdai plateau, U. S. S. R.....	West through central Alaska.....	Caspian Sea.....	2,300	Non-continuous navigation
Yukon.....	Head of Nisutlin in northwest British Columbia.....	West through central Alaska.....	Bering Sea.....	1,924	Nearly entire length
St. Lawrence.....	St. Louis River, Minnesota.....	Through Lakes Superior, Huron, Erie and Ontario; boundary between Ontario, Canada and New York State, and then through Province of Quebec.....	Gulf of St. Lawrence.....	1,900	Montreal for large ocean vessels, Kingston for vessels of 14-foot draft, head of Lake Superior for smaller vessels
Indus.....	Himalayas.....	Northwestern India.....	Arabian Sea.....	1,900	Used locally in plains areas

Si-Kiang.....	Plateau of Yunnan, southwest China..	East and southeast across South China..	China Sea.....	1,860	About 500 miles
Brahmaputra...	Himalayas.....	Through Tibet, Assam and Bengal.....	Ganges River (Bay of Bengal)	1,800	To Dibrugarh, 600 miles
Rio Grande.....	San Juan Mountains, Colorado.....	Through New Mexico, boundary between Texas and Mexico	Gulf of Mexico.....	1,800	Not used for navigation
Sao Francisco..	Southwest part of Minas Geraes in Brazil	North-northeast across plateau of Brazil.....	Atlantic Ocean.....	1,800	To Piranhas, 148 miles
Salween.....	Tibet south of Kun-Lun Mountains....	Extreme southwest China and south through Burma	Gulf of Martaban.....	1,750	Native craft only
Danube.....	Black Forest, Germany.....	Through Austria, Hungary, Yugoslavia, Bulgaria and Rumania	Black Sea.....	1,750	Special river craft to Ulm in Germany
Euphrates.....	Dumlu Dag (mountains), Turkey....	Syria and Iraq.....	Persian Gulf by way of Shatt-el-'Arab	1,700	Only locally
Murray.....	Australian Alps, New South Wales, Australia	West as boundary between New South Wales and Victoria, and then through Province of South Australia	Indian Ocean.....	1,700	Used locally
Tocantins.....	Near Pyrenopolis in southeast Brazil..	North to Para River.....	Para River (Atlantic Ocean)	1,700	Used locally
Colorado.....	Middle park, northern Colorado.....	Through Colorado, Utah, Arizona and Mexico....	Gulf of California.....	1,650	Not used for navigation
Nelson.....	Head of Bow River, western Alberta, Canada	East and north through Alberta, Saskatchewan and Manitoba	Hudson Bay.....	1,600	80 miles
Orinoco.....	Sierra Parima on Venezuela-Brazil boundary	Through Venezuela.....	Atlantic Ocean.....	1,600	600 miles to Cariben Rapids for large vessels
Zambezi.....	11°21'S., 24°22'E., Northern Rhodesia, Africa	Angola, Northern Rhodesia, boundary between it and Southern Rhodesia, and Mozambique	Indian Ocean.....	1,600	Noncontinuous navigation for small craft
Amu Darya.....	Nicholas Range in Pamir Mountains, U. S. S. R.	680 miles boundary between U. S. S. R. and Afghanistan, northwest to Aral Sea	Aral Sea.....	1,500	Ships of 3-ft. draft to Pata Kesar
Paraguay.....	Mato Grosso in southern Brazil.....	Paraguay and Argentina.....	Parana River.....	1,500	Used locally
Himalayas.....	Ganges.....	Northern India.....	Bay of Bengal.....	1,500	For commercial use to Calcutta
Arkansas.....	Central Colorado.....	Through Colorado, Kansas, eastern Oklahoma and Arkansas	Mississippi River.....	1,450	Little used owing to numerous sand bars and fluctuating water level
Dnieper.....	Valdai Hills, U. S. S. R.....	Through western European Russia.....	Black Sea.....	1,400	To Dorogobuzh
Rio Negro.....	Watershed between Orinoco and Amazon basins	Southeast to Amazon River at Manaos.....	Amazon River.....	1,400	450 miles for shallow-draft vessels
Ural.....	Southern Ural Mountains.....	Winding, generally southwest.....	Caspian Sea.....	1,400	Too shallow
Orange.....	Basutoland in southern Africa.....	West across southern Africa.....	Atlantic Ocean.....	1,300	30-40 miles for small vessels above bar at mouth of river
Irrawaddy.....	Confluence of N'mai and Mali Rivers in northeast Burma	Through Burma from north to south.....	Bay of Bengal.....	1,250	Locally
Madeira.....	Confluence of Gaupore and Maumore Rivers on Bolivia-Brazil boundary	Northeast to Amazon River below Manaos.....	Amazon River.....	1,200	In high water steamers go 663 miles to Fall of St. Antonio. Water 5-6 ft. deep at other times
Don.....	Lake Ivan, U. S. S. R.....	Through eastern European Russia.....	Sea of Azov.....	1,200	To Voronezh
Darling.....	Central part of Eastern Highlands, Australia	Southwest across Province of New South Wales..	Murray River.....	1,160	Regular navigation hindered by great fluctuations in flow of river

Principal Rivers of the World—(cont.)

River	Source	Course	Mouth	Approx. miles	Navigable length
Columbia	Columbia Lake, British Columbia	Through British Columbia, Washington and Oregon	Pacific Ocean	1,150	323 miles to mouth of Snake River
Tigris	Taurus Mountains, Turkey	Southeast through Iraq	Persian Gulf by way of Shatt-el-Arab	1,150	Native rafts downstream
Araguaya	Plateau of Mato Grosso in southern Brazil	Northeast to Tocantins River	Tocantins River	1,100	Small sections for river steamers
Sungari	Mountains on border of Manchuria and Korea	Northwest then east through Manchuria	Amur River	1,070	To Kirin
Red	Confluence of Prairie Dog Town Creek and North Fork of Red River in Oklahoma	Southeast between Texas and Oklahoma, southwest Arkansas, and southeast across Louisiana	Mississippi River	1,018	Small boats to Fulton, Arkansas, 508 miles
Churchill	La Loche Lake, Canada	East-northeast across Manitoba	Hudson Bay	1,000	For canoes
Ohio	Confluence of Allegheny and Monongahela Rivers	Boundary between Ohio, Indiana and Illinois on the north, and West Virginia and Kentucky on the south	Mississippi	981	Entire length

LAND AREAS OF THE WORLD

Area	Estimated population, in thousands	Approximate area, in thousands of sq. miles	Percent of total land area	Dimensions, miles East-West	North-South	Mean	Highest	Elevation, feet	Lowest
WORLD	2,164,280	56,611	100	24,902	24,860	2,750	Mt. Everest, Asia, 29,002	Dead Sea, Asia, 1,286 below sea level	
Asia, including Asiatic Russia and Netherlands East Indies	1,189,257	16,795	30	5,400	5,300	3,000	Mt. Everest, Tibet-Nepal, 29,002	Dead Sea, Palestine—Trans-Jordan, 1,286 below sea level	
Africa	161,434	11,626	20	4,600	5,000	1,900	Mt. Kilimanjaro, Tanganyika, 19,319	Qattara Depression, Libyan Desert, Egypt, 440 below sea level	
North America	183,000	9,000	16	3,200	4,000	2,000	Mt. McKinley, Alaska, 20,300	Death Valley, California, 275 below sea level	
South America	91,400	7,045	12	3,200	4,600	1,800	Mt. Aconcagua, Chile, 23,080	Sea level	
Antarctica	Uninhabited	5,000	9	.....	.....	6,000	Mt. Thorvald Nilson, 15,400	Sea level	
Europe, including Iceland and European Russia	528,578	3,842	7	3,300	2,400	980	Mt. Elbrus, U. S. R., 18,564	Caspian Sea, U. S. R., 86 below sea level	
Australia	6,930	2,975	5	2,400	1,900	1,000	Mt. Kosciusko, 7,316	Lake Eyre, 39 below sea level	
Oceania, including New Zealand, Hawaii, Guam, New Guinea, Caroline, Marshall and Mariana Islands	3,681	328	1	.....	.....	.....	Mauna Loa, Hawaii, 13,675	Sea level	

WORLD ELEVATIONS

PRINCIPAL DESERTS OF THE WORLD

Desert	Location	Approximate size	Approximate elevation, ft.	Features
Atacama	North Chile	400 miles long	7,000-13,500	Rugged. Rich in minerals, particularly nitrates.
Black Rock	Northwest Nevada	70 mi. long and in places 20 mi. wide, or about 1,000 sq. mi.	2,000-5,000	Usually dry, with a white alkali crust. Serves as the "sink" of the Quinn River and at times covered with water a few inches deep.
Colorado	Southeast California from San Geronimo Pass to Gulf of California	200 mi. long and a maximum width of 50 miles	Few feet above to about 250 ft. below sea level	Average 90° F. Has reached 125° F. in the shade. Contains Salton Sea. (overflow of Colorado).
Dasht-i-Kavir	Southeast of Caspian Sea in Iran	1,000	1,000	A salt depression. Vast deposits of solid rock salt.
Dasht-i-Lut	Northeast of Kerman in Iran	800 by 400 mi., or at least 300,000 sq. mi.	3,000-5,000	Sandy soils with much alkali. Some well-watered areas. Several caravan routes. Fossil remains.
Gobi (Shamo or "Desert of Sand")	Most of Arabia	1,500 mi. long	1,850	Series of arid plateaus with scattered oases.
Great Arabian	North of 30° N. Latitude	400 mi. long and about 200 mi. wide	3,000	Stony with numerous wadis (dry stream beds).
Syrian (El Hamed)	South of Jaufr	400 by 30 mi.	600-1,000	Almost waterless but rich in pasture in the rainy season (winter and spring). Large sand dunes.
Nefud (Red Desert)	Southeast of Nefud	About one-half the continent	4,500	Waterless but rich in pasture in winter and spring.
Dahna	South portion of Nejd	80 by 50 mi.	Over 3,000	Areas of "fixed dunes" and stony ("gibbers") wastes.
Rub' al Khali	Western portion of Australia	400 by 600 mi., or about 120,000 sq. mi.		Salt desert with numerous salt flats. Some used by automobiles in setting world speed records.
Great Australian	Gibson; Great Victoria; Arunta	110,000 sq. mi.		Mild climate. Red Sand. Some vegetation and game.
Great Sandy	West of Great Salt Lake to Nevada-Utah line	370 by 220 mi. or 70,000 sq. mi.		Flat sandy wastes interspersed with broad expanses of clay soil. Water found only in wells.
Kalahari	South Africa between the Orange and Zambezi Rivers	15,000 sq. mi.		Arid grazing land. Numerous sand dunes moving southeast.
Kara-Kum (Desert of Khiva or "Black Sands")	Southwest Turkistan south of Aral Sea	75 mi. wide	High plateau 5,000 ft. to 440 ft. below sea level to 11,000 above with an average elevation of 1,400 to 1,600 ft.	Temperature range 70°-125° F. during summer months. Hot dry alkali flats interspersed with salt-pans or lakes. Scanty vegetation.
Kizil-Kum	Central Turkistan southeast of Aral Sea	3,200 mi., greatest length along 20° N. Lat.; width varies from 800 to 1,400 mi. Area over 3,500,000 sq. mi.		Mild climate. Named from its bright colorful rocks. Varied surface. East Libyan desert is sand; central part contains rocky hills and mountains; west consists of low stony plains and dunes. Crossed by chain of oases. Well-marked caravan routes.
Mohave	North of Colorado Desert and south of Death Valley in southeast California	500,000 sq. mi.	2,500	Series of deep depressions, some below sea level. Famous caravan routes to oases such as Kharga, Dakhla, Farafra, Bahariya, Siwa, and Farafra.
Painted Desert, Sahara	Northeast Arizona	700 mi. long		Sand and rock desert with some small fertile oases.
Libyan	East portion of the Sahara west of Nile			Extremes of climate—22° to 86° F. in April. Uninhabited. Can be safely crossed only in winter. Marco Polo left a vivid description of this desert.
Nubian	From Red Sea to great west bend of the Nile			Sandy with strips of cultivable land.
Takla Makan	East Turkistan in Tarim Basin			
Thar (Indian)	Northwest India chiefly in Rajputana	Between Rann of Cutch and the Sutlej, or about 300 mi. by 380 mi.	About 500	

Volcanoes of the Earth

GENERAL DATA

430 volcanoes with recorded eruptions in historical times.

2,500 recorded eruptions, more than 2,000 of which took place in the Pacific area.

Of known active volcanoes:

- 80—submarine type
- 275—in Northern Hemisphere
- 155—in Southern Hemisphere
- 366—reported in Pacific area

I ATLANTIC-INDIAN AREA

A. Mediterranean region

1. Italy: Mt. Vesuvius, southeast of Naples. Over 4,000 ft. high. Only active volcano on continent of Europe. Pompeii buried by an eruption in A.D. 79. Latest eruption in 1944.

2. Sicily: Mt. Etna, eastern Sicily. Over 10,000 ft. high. Over 80 recorded eruptions. Lava flow in 1928 blocked railroad between Messina and Catania.

3. Lipari Islands (north of Sicily).
a. Stromboli, about 3,000 ft. high. Called "Lighthouse of the Mediterranean".
b. Volcano, about 1,000 ft. high.

4. Grecian Archipelago: Santorin, on an island by same name in Cyclades. Severe eruption in 1866.

B. Atlantic area

1. Canary Islands: Teneriffe. Over 12,000 ft. high (Pico de Teide). Geologically one of the most instructive volcanic cones.

2. Cape Verde Islands: Fogo. Over 8,000 ft. high. Severe eruption in 1847.

3. Iceland: At least 25 active volcanoes. Has exceeded all other volcanic areas in output of lava. Since A.D. 1500 estimates place one-third of world's lava output in Iceland.

a. Hekla. About 5,000 ft. high. Several craters, largest about $1\frac{1}{4}$ miles in circumference. Nearly 20 eruptions since A. D. 1100. Most recent eruption in 1878.

b. Skaptarjökull. Near Skaptar. Laki, one crater, 2,800 ft. high; erupted in 1783. A single basalt flow was 50 miles long, 12-15 miles wide, and 800 ft. deep in some places.

c. Askja. Largest volcano in Iceland. Altitude 4,600 ft. Crater with area of 16 square miles contains a lake of hot water 5 miles in circumference.

4. Jan Mayen: Beerenberg, northern part of island. Extinct volcano over 8,000 ft. high.

5. West Africa: Mt. Cameroon. Altitude of 13,349 ft. Has several craters. Last erupted in 1922. Its western side is one of the rainiest regions in the world (400-430 in. annually).

6. Lesser Antilles (West Indian Islands):

a. Mt. Pelée. In northwestern Martinique.

Altitude about 4,400 ft. Eruption in 1902 destroyed town of St. Pierre and killed 30,000 in a few minutes.

b. La Soufrière. On St. Vincent Island. Altitude about 3,500 ft. An eruption in 1902 destroyed much property and caused numerous deaths.

C. Indian Ocean

1. Comoro Islands, east of northern Mozambique. One volcano, Kartala, altitude over 8,500 ft. Visible for over 100 miles. Last erupted in 1904.

2. Réunion Island, east of Madagascar. Piton de la Fournaise, over 3,500 ft. Eruptions in the form of large lava flows.

3. East Africa.

a. Kilimanjaro, in rift valley in Tanganyika. Extinct. Highest mountain in Africa (19,319 ft.).

b. Dubbi, in Eritrea. Altitude about 4,500 ft.

c. Afderá, in Eritrea. Altitude over 6,600 ft.

d. Kirunga-Cha-Gungo (Mt. Götzen), near Lake Kivu. Altitude 11,300 ft. and crater 1 mile wide, partly active.

e. Kirunga-Ndogo, near Lake Kivu. Altitude 11,000 ft.

II THE PACIFIC AREA

A. Northwest portion

1. Kamchatka: 14-18 active volcanoes.

a. Shiveluch. Altitude over 10,500 ft. Most northerly volcano of Kamchatka group.

b. Kluchevskaya (Kluchev). Altitude 15,745 ft. Highest peak in Siberia and highest active volcano in old world, snow-capped. Called the "Etna of Kamchatka." Last eruption in 1932.

c. Koryatskaya. Altitude over 11,500 ft. Violent eruption in 1895.

d. Avachinskaya. Altitude about 8,200 ft. Crater several hundred yards in circumference. Violent eruptions in 1827, 1837, and 1855.

2. Kurile Islands. Name derived from the Russian "Kurit" (to smoke), alluding to the active volcanic character of the groups. There are at least 13 active volcanoes and several submarine outbreaks.

3. Japan (at least 33 active vents).

a. Fujiyama, southwest of Tokyo. Altitude 12,395 ft. Symmetrical in outline. Snow-covered. Regarded as a sacred mountain and numerous pilgrims make the ascent in midsummer.

b. Adzuma-yama. Altitude 7,733 ft. Last eruption in 1900 when 82 sulfur diggers were killed or injured.

c. Shirane. Altitude 10,330 ft. Eruption in 1905 enlarged main crater to a length of 3,000 ft.

d. Asamayama. Altitude about 8,200 ft. Continuously active, violent eruption in 1783.

e. Aso-san. Altitude about 5,600 ft. Crater 10 by 15 miles is the largest in the world.

f. Bandaisan. About 120 miles north of Tokyo. Violent eruption in 1888 removed an estimated 2,982 tons of material and devastated a 27-square-mile area. Altitude 3,037 ft.

4. Ryukyu Archipelago.

d. Nakano-shima. Altitude 3,485 ft.

e. Suwanose-shima. Altitude 2,697 ft.

5. Bonin Islands (Ogasawara Islands): Mt. Suribachi on Iwo Jima. Altitude 546 ft. A sulfurous steaming volcano. Raising of U. S. flag over Mt. Suribachi was one of the dramatic episodes of World War II.

6. New Britain Archipelago (numerous active vents): Father, on New Britain. Altitude 7,500 ft.

7. Santa Cruz Islands. Tinakula, on Vanicoro Island. Altitude 2,200 ft.

8. New Hebrides: Lopevi. Altitude 4,714 ft. An isolated cone.

9. Samoan Archipelago: Savail, an eruption in 1905 did considerable damage. Niuafou (Tin Can) between Samoa and Fiji Islands has a crater 6,000 feet below and 600 feet above water. Active in 1943.

10. Philippine Islands (98 eruptive centers).

a. Taal. Elevation about 1,000 ft. On Volcano Island in Lake Bombon. Crater over 7,500 ft. in diameter. Last eruption in 1911.

b. Mayon (Albay). Altitude about 8,000 ft. In southeastern Luzon. An almost perfect cone. Highest peak. Continuous mild activity. In 1897 there was a destructive eruption.

11. Moluccas: A volcanic chain of islands which contains several active volcanoes.

12. Hawaiian Group.

a. Mauna Loa. Altitude over 13,000 ft. Also called "Long Mountain." Discharges more lava than any other volcano. Largest volcanic mountain in the world in cubic content. Its crater, Mokuaweweo, is 3.7 square miles in area. A flow in 1935-36 was bombed to divert it from destroying a settlement.

b. Mauna Kea, altitude 13,784 ft. Highest mountain in group. Highest mountain in the world, since the base is 18,000 ft. below sea level, making a total height of nearly 32,000 ft. Called "Snow Mountain" because it is snow-capped.

c. Hualalai. Altitude 8,269 ft. Has many small pit craters. Only lava flow in historic times was in 1801.

d. Kilauea, altitude 4,090 ft. A vent in side of Mauna Loa but apparently independent of it. One of the most spectacular and active craters. Crater has an area

of 4.14 square miles. Activity usually confined to crater pit but has had some eruptions (1790 and 1924). A volcanic observatory is located on Kilauea.

B. Southwest portion

1. Sumatra—90 volcanoes have been discovered, 12 are now active. They extend southwards from Sinobong (12,140 ft.) in the northwest to Krakatoa in Sunda Strait. Volcanoes include Sinabung (8,101 ft.), Sibayak (7,075 ft.), Pusuk Bukit (6,562 ft.), Berapi (5,875 ft.), Pasaman (9,844 ft.), Talang (8,399 ft.), Merapi (9,484 ft.), Singalang-Tandikat (9,479 ft.), Korinchi or Indrapura Peak (12,484 ft.), Kaba (6,528 ft.), Dempo (10,326 ft.), and Krakatoa. The last named is a small volcanic island in the Sunda Strait. Numerous volcanic discharges occurred in 1883. One explosion caused the disappearance of the highest peak and the northern part of the island. Fine dust was carried around the world in the upper atmosphere. Over 36,000 persons lost their lives. Tidal waves felt on California coast. Active again in 1928.

2. Java—13 of 125 volcanic centers are active. Few serious eruptions.

a. Papandayan. Altitude over 8,600 ft. Has numerous steam jets. Destroyed about 3,000 persons in 1772. Capped by sulfur deposits.

b. Bromo. Altitude 7,800 ft. Steam constantly rises from its huge crater. Boiling wells and mud cauldrons present. Erupted in 1928.

c. Galunggung, famous for two destructive eruptions in 1822. It is thought that over 100 villages and about 4,000 lives were lost.

3. Lesser Sunda Islands—15 eruptive cones.

a. Batoer (Batur) on Bali. Only active volcano on island. Altitude over 7,000 ft. Lava flows occurred in 1926.

b. Agung, on Bali. Altitude about 10,500 ft. Rises from a crater lake of that name. Now extinct.

c. Rindjani, on Lombok, about 12,000 ft. in elevation.

d. Temboro on Soembawa (Sumbawa), altitude about 9,000 ft. but was 13,000 ft. prior to a severe eruption in 1815 which ejected an estimated 36 cubic miles of material.

e. Other Sunda Islands: Flores Island has 100-200 eruptive points. Other Lesser Sunda Islands also have eruptive points but none of significance.

4. Melanesian area: Volcanoes are present on New Guinea, New Hebrides, Santa Cruz, Solomons, New Britain, and on numerous other small islands.

5. New Zealand.

a. Tarawera on North Island. Severe eruption in 1886 destroyed the famous "pink" and "white" sinter terraces of Rotomahana, a hot lake in North Island.

b. Ngauruhoe. Altitude 7,515 ft. Emits steam and vapor incessantly. Erupted in 1926; only active volcano in New Zealand.

C. Northeast border

1. Aleutian area—32 active vents known; numerous inactive cones.

a. Shisaldin on Unimak. Altitude 8,683 ft.

b. Makushin, on Unalaska. Altitude 5,691 ft.

c. Bogoslof, on Bogoslof Island. Altitude about 1,000 ft. Mountain first appeared after an eruption in 1796. New Bogoslof Island appeared in 1883. Two more islands appeared in 1906 and 1907. These blew up in 1909 and were replaced by two others.

2. Alaska.

a. Mt. Wrangell. Altitude 14,005 ft. Named for Baron Wrangell, a former Russian governor of Alaska.

b. Mt. Katmai. About 7,500 ft. high. Prior to 1912 had been inactive. On June 6, 1912, a violent eruption occurred. The "Valley of Ten Thousand Smokes" appeared after the eruption. Mildly active since then.

3. United States: Mt. Lassen. Altitude 10,453 ft. Only active volcano in the United States, 1915 the last period of activity. Other mountains of volcanic origin are Mt. Shasta, Mt. Hood, and Mt. Rainier.

4. Mexico.

a. Popocatepetl. Altitude 17,888 ft. Crater 500 ft. deep and $2\frac{1}{2}$ miles in circumference. Not entirely extinct.

b. Ceboruco. Altitude 7,100 ft. Active in 1875.

c. Colima Group. Fuego. Altitude 14,228 ft. Has had frequent eruptions; latest in 1909.

d. Jorullo. Altitude 4,262 ft. First eruption took place in 1769.

e. Orizaba. Altitude 18,209 ft. Probably the most perfect and beautiful of all volcanoes. Comparable to Mt. Fuji in Japan.

f. Tuxtla. Altitude 4,900 ft. Had a violent eruption in 1793 but is now quiescent.

g. Soconusco. Altitude 7,872 ft. Smokes occasionally.

h. Tacaná. Altitude 13,335 ft. Still active.

i. Parícutin. A new volcano. First appeared in February 1943 in a field. In less than a week a cone over 140 ft. high developed with a crater one quarter mile in circumference. Cone grew over 1,500 ft. in 1943. Still active and growing.

5. Guatemala.

a. Santa María Quezaltenango. Altitude 12,361 ft. Frequent activity between 1902 and 1908, and 1922 and 1928, after centuries of quiescence. Most dangerously active vent of all Central America at present.

b. Other volcanoes include Acatenango, 12,972 ft.; Fuego ("fire"), 12,581 ft.; Agua ("water"), 12,310 ft.; Zunil, 11,588 ft.; and Atitlán, about 7,600 ft.

6. Salvador: Active volcanoes include Izalco, "beacon of Central America", first appeared in 1770, now 6,000 ft. high and growing; San Salvador, which had a violent eruption in 1917; San Miguel, 8,000 ft. high, with a quietly steaming crater; Maricelino; Santa Ana; and Soledad.

7. Nicaragua: Volcanoes associated with Nicaragua are Telica, Coseguina, and Momotombo (4,126 ft.). Between Momotombo on the western shore of Lake Managua and Coseguina overlooking the Gulf of Fonseca, there is a string of more than 20 cones, many still active.

8. Costa Rica: Four volcanic cones whose bases merge are Poás (about 9,000 ft.), Barba (9,280 ft.), Irazú (11,320 ft.), and Turrialba (11,350 ft.).

D. Southeast border

1. Colombia: Nevado del Huila, a vapor-emitting volcano (18,700 ft.) and Tolima (18,438 ft.).

2. Ecuador.

a. Cotopaxi (19,498 ft.) is perhaps the highest active volcano in the world and possesses a beautifully formed cone. Has numerous eruptions.

b. Cayambe (19,062 ft.) is almost on the equator. Summit perpetually snow-covered.

c. Other volcanoes include Tungurahua (about 16,700 ft.), Sangay (17,470 ft.), and Antisana (altitudes of both 18,800 ft. and 19,355 ft. have been reported).

3. Peru and Bolivia have numerous active volcanoes.

a. Misti (Arequipa), in Peru. Altitude 19,200 ft. The world's highest meteorological observatory formerly located near its summit.

b. Sajama, in Bolivia. Altitude 21,320 ft.

c. Licancaur (Atacama) in Bolivia. About 19,500 ft. high. On border between Chile and Bolivia near Atacama.

4. Chile and Argentina: About 25 active or potentially active volcanoes. Little published information about this area. Most names of these volcanoes unknown to most people. In 1913 smoke issued from Hualalatri and Isluga (about 19° S. latitude). Smoke issued from San Pedro and Antofalla in 1901 and again in 1911. Cerro Azuán and Descabezado (about 35° S. latitude) had explosive eruptions in 1907 and 1913. Chillán (lat. 36° S.) developed a new crater in 1906. Llama (10,000 ft.) was in constant activity between 1903 and 1908 and erupted in 1927; appears to be a formidable volcano. Maipo active in 1905. Volcanic area about 40° S. latitude near Valdivia contains Villarica, active from 1906 to 1908 and in 1910; Riniñahue, active in 1907. During 1906 and 1907 Hegan and Calbuco issued steam and smoke clouds. Eruptions of Calbuco (6,600 ft.) were witnessed by research groups in 1920 and again in 1929. Farthest south of volcanoes on South American mainland.

Some Interesting Caves and Caverns of the World

Aggtelek. In Hungary. Large stalactitic cavern near Tornaia, about 20,000 ft. long.

Altamira Cave. In Spanish Pyrenees. Contains animal paintings (Old Stone Age art) on roof and walls of cave.

Antiparos. On island of same name in the Grecian Archipelago. Some stalactites are 20 ft. long. Brilliant colors and fantastic shapes.

Blue Grotto. On Island of Capri. Cavern hollowed out in limestone by constant wave action. Now half filled with water because of sinking coast. Name derived from unusual blue light permeating the cave. Source of light is a submerged opening, light passing through the water.

Carsbad Caverns. Southeast New Mexico. Probably largest cavern in the world. Only partly explored (32 miles). Three levels, 754, 900 and 1,320 feet below the surface.

Ederhoffer Grotto. Near Düsseldorf, Germany. Bones of the Neanderthal man were found here in 1856.

Fingal's Cave. On island of Staffa off coast of western Scotland. A sea cave carved by waves in lava flows. Penetrates about 200 ft. inland. Contains basaltic columns 20-40 ft. high that look hand hewn.

Fredrikshall. Norway. Large cavern calculated to be several thousand feet deep.

Grotto of Topazes. Switzerland. Roof and sides studded with topaz.

Guacharo (Oil-bird) Cave. Near Caripé in Venezuelan province of Cumaná. Cave as described by Humboldt had tropical vegetation far within its recesses. Inhabited by birds which are killed for their fat by the Indians.

Ice Cave. Dobschen, Czechoslovakia. Noted for its beautiful crystal wintry effects.

Jenolan. In Blue Mountains, New South Wales, Australia. Beautiful stalactitic formations both massive and delicate.

Kent's Hole. Near Torquay, England. Stalactitic type.

Kirksdale. England and Gallenreuth, Germany. Both caves remarkable for quantities of bones of elephants, rhinoceroses and hyenas found in them.

Luray Caverns. In Shenandoah Valley of Virginia. Has large stalactitic and stalagmitic columns. Very colorful.

Mammoth Cave. Limestone cavern in central Kentucky. Cave area is about 10 miles in diameter but has about 150 miles of irregular subterranean passageways at various levels. One "room" covers 5 acres.

Peak Cavern or Devil's Hole. Derbyshire, England. About 2,250 ft. into a mountain and lowest part is about 600 ft. below the surface.

Postumia (Adelsberg) Grotto. Near Postumia, Italian frontier station on Yugoslavian border. Best-known cave on the Carso. Piuca (Pivka) River flows through part of it. Caves have numerous and beautiful stalactites.

Singing Cave. Iceland. A lava cave. Name derived from echoes of people singing in the cave.

St. Michael's Cave. Principal one of numerous stalactitic caves in Rock of Gibraltar.

Wind Cave. In Black Hills of South Dakota. A limestone cavern but stalactites and stalagmites almost entirely missing. It has a variety of crystal formations called "boxwork."

Geysers

Geysers exist in many volcanic regions such as Japan and South America, but their greatest development is in Iceland, New Zealand and Yellowstone Park, Wyoming. The word "geyser," taken from the Icelandic "geysir," meaning spouting hot spring, now applies to any similar erupting spring.

Iceland. Principal geyser area is about 60 miles northwest of Mt. Hekla, where there are over 100 geysers and hot springs in about two square miles. The main ones follow.

Great Geyser (Geysir) sends up a column 160 to 180 ft. high intermittently from an opening more than 9 ft. across and 80 ft. deep.

Strokkur (Churn) is constantly bubbling and occasionally erupts.

New Zealand. There is a great profusion of boiling springs, steam jets and mud volcanoes northeast of Lake Taupo on North Island. Main geysers are Waiite with a 30-35 ft. column, Pohutu and Waimauku.

United States.

Yellowstone National Park, Wyoming. Nearly all the more than 100 geysers and 4,000 hot springs are located in the western portion of the park. The most important ones are:

Mammoth Hot Springs. Sides of a hill are steps and terraces over which flow the steaming waters of the hot springs laden with minerals. Each step is tinted by algae in the water to many shades of scarlet, orange,

pink, yellow and blue. Terraces are white where no water flows.

Norris Geyser Basin has 18 or more, the number varies.

Valentine—highest in basin, 75 ft. at 18-hour intervals; tube is 60 ft. long.

Minute—15–20 ft. high, several hours apart.

Others are small; these include Steamboat, Fearless, Veteran, Vixen, Corporal and Monarch.

Lower Geyser Basin. In the 1870's it had 680 geysers. Many now are only hot springs but at least 18 are active.

Fountain—At one time very well known. Water thrown 75 ft. in all directions and at all angles.

Some of the others are Turk, Bead and White Dome.

Midway Geyser Basin has vast steaming terraces of red, orange, pink and other colors; pools and springs.

Upper Geyser Basin.

Artemisia sends up a column 35 ft. high for 10 to 15 minutes every 24 hours.

Fan sends out fan-shaped eruptions about 60 ft. high every 2 or 3 days.

Riverside has an unusual cone; throws water 75 ft. obliquely over the river from lower crater for half an hour. About 5½ to 8 hours between eruptions.

Rocket by itself has jets up to 70 ft.

at intervals of 2 to 5 hours. When its neighbor Grotto erupts simultaneously the jet is only 10 ft.

Grotto throws water 20 to 30 ft. for 15 minutes to 8 hours.

Giant erupts to 250 ft., the highest in the world. Eruptions last an hour but are 3 days to 3 months apart.

Daisy sends water to a height of 100 ft. about every 90 minutes. Partial vacuum causes water to return for further flow.

Old Faithful sends up a column about 140 high at intervals of about 65 minutes, occasionally 35 to 80 minutes. Eruption lasts about 4 minutes. Only major park geysers that erupts at predictable intervals. Discharges about 15,000 gallons of water at each eruption.

Giantess erupts like a small volcano every six to nine months. The eruption rises to a height of 200 ft. and usually lasts 4½ hours.

Lion group—Lion, Lioness, Big Cub and Little Cub erupt as many as three times a day. Roar before the erupt.

Castle is reported to have largest and most imposing cone of any active geyser in the world. Resembles castle wall. Erupts once a day to a height of 75 ft. but throws water continually to about 20 ft.

Famous Waterfalls of the World

Waterfall	Location	River	Height, feet
Cuquenán	Venezuela	Cuquenán	2,000
Sutherland	South Island, N. Z.	Arthur	1,900
Tugela	Natal, South Africa	Tugela	1,800
Ribbon (Yosemite)	California	Small creek flowing into Yosemite valley	1,610
Gavarnie	Southwestern France	Gave de Pau	1,510
Upper Yosemite	California	Yosemite Creek, tributary of Merced	1,430
Takkakaw	British Columbia	Tributary of Yoho	1,200
Staubbach	Switzerland	Staubbach (Lauterbrunnen valley)	980
Trummelbach	Switzerland	Trummelbach (Lauterbrunnen valley)	980
Middle Cascade (Yosemite)	California	Yosemite Creek, tributary of Merced	910
Multnomah	Oregon	Multnomah Creek, tributary of Columbia	850
Vettisfos	Norway	Morkedöla	850
King Edward VII	British Guiana	Courantyne	840
Gersoppa	India	Sharavati	830
Kaletour	British Guiana	Pataro	740
Kalambo	Tanganyika	.....	700
Fairy (Mt. Ranier Park)	Washington	Stevens Creek	700
Maradalefos	Norway	Stream flowing into southwestern part of Eklisdalsvand (lake)	680

Famous Waterfalls of the World—(cont.)

Waterfall	Location	River	Height, feet
Skykkjefos	Norway	In Skykkjedal (valley) of Inner Hardanger Fjord	650
Verni	Italy	Vellino, tributary of Nera	650
Maletsunyane (Le Bihan)	Basutoland, Africa	Maletsunyane	630
Bridal Veil (Yosemite)	California	Bridal Veil Creek, tributary of Merced	620
Nevada (Yosemite)	California	Merced	594
Foringfos	Norway	Bjorela	535
Kjaeggedalfos	Norway	Tysaa	525
Marina	British Guiana	Tributary of Kuribrong, a tributary of the Patara	500
Nequendama	Colombia	Bogotá	450
King George's	Cape Province	Orange	450
Interval Cascades	South Africa		
Guayra	Brazil	.....	400
Illouette (Yosemite)	Paraguay-Brazil	Parana	374
Granite (Mt. Ranier Park)	California	Illouette Creek, tributary of Merced	370
Splendor of Sun	Washington	Granite Creek	350
Victoria	Nikko, Japan	.....	350
	South Rhodesia,	Zambezi	343
	South Africa		
Vernal (Yosemite)	California	Merced	317
Virginia	Northwest Terri-	South Nahanni, tributary of Mackenzie	315
Lower Yosemite	tory, Canada	Yosemite Creek, tributary of Merced	310
Lower Yellowstone	California	Merced	308
Grand	Wyoming	Yellowstone	302
Mulskin (Mt. Ranier Park)	Labrador	Hamilton	300
Reichenbach	Washington	Paradise	
	Switzerland	Reichenbach, tributary of Aare	300
Chamberlain		Aare	300
Lower Gastein	British Guiana	.....	280
Snoqualmie	Austria	Ache	268
Seven Falls	Washington	Snoqualmie	266
Montmorency	Colorado	.....	265
Paulo Affonso	Quebec, Canada	Montmorency	265
Harsprang	Brazil	São Francisco	246
Handeckfall	Sweden	Stora Lule	240
Taughannock	Switzerland	Aare	215
	New York	Taughannock Creek, tributary of Cayuga Lake	215
Pissevache	Switzerland	Salanfe, tributary of Rhône	210
Shoshone	Idaho	Snake	210
Iguassú	Brazil-Argentina	Iguassú	207
Upper Gastein	Austria	Ache	200
Comet (Mt. Ranier Park)	Washington	Van Trump Creek	180
Twin	Idaho	Snake	168
Narada (Mt. Ranier Park)	Washington	Paradise	167
Niagara	New York-Ontario	Niagara	
Handöl	Sweden	Stream flowing into Annsjö (lake)	148
Tower (Yellowstone)	Wyoming	Tower Creek, tributary of Yellowstone	132
Stora Sjöfallet	Sweden	Between Kartejaur and Langesjaur, lakes on the Stora Lule	121
Tannforsen	Sweden	Between Tannsjö and Nor-ensjö (lakes)	120
Murchison	Uganda	Nile	120
Upper Yellowstone	Wyoming	Yellowstone	109

May 15, 1918

First air-mail route established between New York, Washington and Philadelphia.

May 20, 1927

C. A. Lindbergh made the first transatlantic solo flight.—F. P. A.

Selected Glaciers and Ice Fields of the World

I NORTH AMERICA

A. Alaska. Greatest abundance between 56° and 61° N. In Alaska 170 have been named. About 31 are live glaciers (those that discharge icebergs into the sea).

1. Malaspina. Along seaward base of Mt. St. Elias. Largest existing continental glacier outside of Antarctica. Covers about 1,200 square miles and extends 50-80 miles along the coast. Part of it lies above the snow line (2,500 ft.) but bulk of it lies between snow line and 1,500 ft.

2. Muir. South slope of St. Elias Mountains. Covers over 350 square miles. About 50 miles long, 25 miles wide and 1,500 ft. deep. Reported to move 6-10 ft. a day but it is retreating at the rate of 3 miles in 15 years. Discharges "bergs" into Glacier Bay. Much visited prior to earthquake in 1899 which shattered the glacier and increased discharge of ice so that steamers no longer found it safe to approach close to the face.

3. Prince William Sound. Eleven live glaciers. Columbia Glacier has a front 4 miles wide and 300 ft. high.

4. Wrangell Range contains one of the most compact systems of glaciers in Alaska.

5. Alaska Range

a. North slopes: Source of Herron is the snowfields of Mt. Foraker; Peters Glacier encircles northwest end of Mt. McKinley, and Muldrow is on the northeast slope.

b. South slopes: Greatest glaciers of Alaska Range on south slopes exposed to moisture-bearing winds of the Pacific. Largest are in Yenta and Chulitna river basins.

6. Coast Range

a. Sumdum and Dawes, east of Admiralty Island.

b. Taku Glacier, a mile wide and 100-300 ft. high at its face. Extends down east side of Coast Range and varies from two to three miles in width. Located near Juneau.

B. Canada. The Rockies and Selkirks support hundreds of glaciers, mostly not very large, but some having 100 square miles of snowfield. Two peaks with glaciers are Mt. Joffre (11,361 ft.) and Mt. Robson (12,972 ft.).

C. United States.

1. Mt. Shasta has minor glaciers on its northern slope.

2. Mt. Rainier contains largest accessible single-peak glacier in U. S. There are 48 square miles of glaciers ranging in width from 50 ft. to one mile, and in thickness from 50 ft. to many hundreds of feet.

3. Rocky Mountains. Over 60 small glaciers, remnants of glacial era, remain in

Glacier National Park. Other glaciers scattered throughout the Rockies such as Hallett Glacier in Colorado.

4. Sierra Nevada. About 65 small glaciers remain in altitudes above 11,000 ft. Largest glaciers on flanks of Middle Palisade, North Palisade, Ritter, Lyell, Maclure, and Conness Peaks.

D. Greenland. About 86% of surface or 720,000 square miles, covered by an ice cap thousands of feet thick. In several districts glaciers border and discharge huge icebergs into the sea. Those originating on the west coast are much larger than those of the east coast.

The districts are:

1. Between Cape York and Wandel Land 233 miles. Ice forms 186 miles of this coast and reaches the sea in at least 70 places. Peary Glacier, one of the largest is 12½ miles long, and the outermost 25 miles floats on the water. Others with more than 6 miles sea frontage are Steenstrup, Nanassen, King Oscar, Holm, John Ross, Wulff, and Dietrichson.

2. Upernivik District. One fifth of the total ice front reaches the sea. Giesecke and Upernivik are the largest. Upernivik is reported to move about 100 ft. per day.

3. Jacobshavn District. Tallest icebergs originate here. Some 330-450 ft. high have come from the Jacobshavn Glacier. Cubic content of one measured contained 7,851,848 cubic yards, twice the volume of the concrete in Boulder Dam.

4. Godthaab District. Numerous glaciers extend from inland ice to heads of fiords.

5. Fredrikshaab District. Fredrikshaab Iceblink is about 12 miles across. Moves about 10 ft. a day.

6. Jullanshaab. Numerous glaciers extend from inland ice to the sea and produce icebergs. Sermilik Fiord is an active area.

7. Between Igdluarssuk and Angmagssalik. Ice extends to the sea, partly as broad glaciers and as an infinite, white, level plain.

II SOUTH AMERICA

Except for southern area, there are few glaciers of any size. Some alpine glaciers exist on the higher peaks even at the equator but rarely extend beyond the snow line. The snow line of the Tropical Andes is between 15,000 and 16,000 ft. at 37° S., 6,500 ft.; at 40° S., 5,000 ft.; and at Tierra del Fuego, 2,300 ft. South of 46° S., small ice fields form a continuous mantle over the central mountain zone between Chile and Argentina. One example is the Balmaceda Glacier, Last Hope Sound, Chile.

II. EUROPE

A. Iceland. Snow fields and glaciers cover 17% square miles (13%) of its surface. There are 120 known glaciers.

1. Vatnajökull covers 3,280 square miles. The largest glacier of this group covers 1,000-200 square miles.

2. Other large glaciers or snowfields are: Traefajökull, the highest glacier in Iceland; Myrdalsjökull and Eyjafjallajökull which cover 390 square miles; Hofsjökull, covering 520 square miles; and Langjökull, covering 500 square miles.

3. Some smaller icefields in Iceland are Lamujökull, Drangajökull, Tungnafellsjökull, Eiríksjökull, Tindjallajökull, and Skeidararjökull.

B. NORWAY.

1. Jostedalstraen. Largest European icefield (400-500 square miles). From it most glaciers extend to within 150-200 ft. of sea level.

2. Jotunheim. Ice cap is broken by deep valleys.

3. Folgefonn. Between Hardangerfjord and its branch, Sörfjord. Covers 110 square miles. Most southerly large area in Norway.

4. Svartisen. Covers 230 square miles and from it glaciers descend almost to sea level.

5. Engabreen. A small glacier about 70° N. Enters sea in Jokulfjord and gives birth to miniature icebergs.

6. Selland. On island of same name south of Hammerfest. Glacier covers about 6 square miles.

C. ARCTIC ISLANDS.

1. Jan Mayen. An island between Greenland and north of Norway. Henry Hudson discovered it in 1607. Contains fully developed glaciers which discharge icebergs into the sea.

2. Other ice-laden islands include Spitzbergen, Novaya Zemlya, Franz Josef Land and others.

D. Pyrenees. Glaciers confined to northern slopes of central Pyrenees form a narrow zone at the crest of highest mountains. Descend but little down the valley. Argeles Valley contains the best known glacier.

E. Alps. Estimated to contain 1,200 separate glaciers and snow fields which probably cover 700 square miles. Greater number in Canton Valais. Lowest point reached by Alpine glaciers varies but is as low as 3,200 ft. above sea level (Grindelwald). Average altitude is about 4,200 ft. and perpetual snow line between 8,000 and 9,500 ft.

1. Aletsch Glacier is 16 miles long and with its snow fields covers over 50 square miles.

2. Unteraar and Vlescher in the Bernese Oberland are each 10 miles long.

3. Gorner is 9 1/4 miles long.

4. Mer de Glace is 9 1/4 miles long. Covers 16 square miles. On north slope of Mt. Blanc. Much visited. Average flow 2 feet per day in summer and autumn. Descends to 3,770 ft.

F. Caucasus Mountains. Snow line between 9,500-10,000 feet on north but 1,000 ft. higher on south facing slopes. Estimated 900 glaciers in western half of Middle Caucasus. Few in eastern half. All of the glaciers in the Caucasus are estimated to cover 625-650 square miles. Best known glaciers include:

1. Maliev on Kasbek, 36 miles long.

2. Bezingi, or Ullu, 10.5 miles long, descends to 6,535 ft.

3. Leksyr, 7.5 miles long, descends to 5,690 ft.

4. Tseyar or Zea, 6 miles long, descends to 6,730 ft.

5. Karagom, 9.5 miles long, descends to 5,790 ft.

6. Dyevdorak, or Devdorak, 2.5 miles long, descends to 7,530 ft.

7. Khaldeh or Gereshe, 4 1/4 miles long.

8. Tuyber, 6.5 miles long, descends to 6,565 ft.

9. Tsanner or Zanner, 6.5 miles long, descends to 6,325 ft.

10. Adish or Lardkhat, 5 miles long, descends to 7,450 ft.

IV ASIA. Thousands of little-known small glaciers exist on the high mountains of Asia, particularly the Himalayas, Karakoram, Hindu-Kush, Kunlun, and Tien-Shan Mountains. The largest which have been explored are:

A. Chogo Lungma, Hispar, Baltoro, and Biafo glaciers in the Karakorum Range. They are among the largest existing glaciers.

B. Zemu, about 18 miles long in the Kanchenjunga Range (Himalayas). Several others in the same range are 11 to 16 miles long.

C. Rongbuk, on north slope of Everest, ends at about 16,500 ft.

D. Kyetrack, on north slope of Everest, ends at 15,400 ft.

E. Fedchenko, in the Pamirs (Salaisk Range), west of Lake Kara Kul in the Muk-Su Basin. One of largest glaciers in the world with the exception of arctic glaciers. About 50 miles long, 14,000 ft. above sea level with temperature often as low as -76° F.

F. Youzhni Inilchek. In Tien-Shan Range. About 50 miles long.

V AFRICA. A few glaciers located on two high mountains.

A. Mt. Kenya (17,040 ft.). West of the main divide 15 glaciers descend north and south. Lewis and Gregory, each 1 mile long, are the two largest. Kolb is much smaller. Most terminate between 14,800 and 14,900 ft.

B. Mt. Kilimanjaro (19,319 ft.). Several small glaciers, two on the west side and three on the northwest side.

VI AUSTRALIA AND NEW ZEALAND. No part of Australia is high enough for snow to remain throughout the year. New Zealand has a glacial system of some magnitude on South Island.

A. East slope of Southern Alps.

1. Tasman, the largest of New Zealand's glaciers. Eighteen miles long by $1\frac{1}{4}$ miles wide. Terminal face 2,000 ft.

2. Murchison covers 5,800 acres. Eleven miles long.

3. Mueller covers 3,200 acres. Eight miles long.

4. Godley covers 5,312 acres. Eight miles long.

5. Hooker covers 2,416 acres. Seven and one quarter miles long.

B. West slope of Southern Alps. Glaciers more numerous than east coast owing to greater precipitation and descend to lower levels. Largest are:

1. Fox, nine and three-quarter miles long, terminal face 670 ft.

2. Franz Joseph, eight and one-half miles long, terminal face 690 ft.

VII ANTARCTICA. Probably less than 100 square miles of its 5,000,000 square miles is free from permanent ice covering. Doubtful if ice is more than 2,000 ft. thick except in basins but some estimates give several miles. Ice fronts vary from 100-400 miles in width at the sea. Icebergs 5 to 10 miles long often break off from ice fronts.

Largest Lakes of the World

Lake	Location	Area, sq. mi.	Maximum depth, ft.	Length, miles	Surface elevation above sea level, ft.
Superior	United States and Canada	31,810	1,180	350	602
Victoria	East central Africa	26,200	270	250	3,720
Aral	U.S.S.R.	24,400	222	280	157
Huron	United States and Canada	23,010	750	206	581
Michigan	United States	22,400	870	307	581
Baikal	U.S.S.R.	13,300	5,000	418	1,515
Tanganyika	East central Africa	12,700	4,700	450	2,536
Great Bear	Canada	11,200	....	195	200
Great Slave	Canada	11,172	....	325	391
Nyasa	Southern Africa	11,000	2,580	350	1,650
Erie	United States and Canada	9,940	210	241	572
Winnipeg	Canada	8,555	70	260	710
Ontario	United States and Canada	7,540	738	193	246
Balkash	U.S.S.R.	7,200	36	440	900
Ladoga	U.S.S.R.	7,000	730	120	55
Onega	U.S.S.R.	3,764	408	145	125
Nipigon	Canada	3,500	....	70	852
Rudolf	Eastern Africa	3,475	....	185	1,250
Titicaca	Bolivia and Peru	3,200	1,000	130	12,466
Nicaragua	Nicaragua	3,089	200	110	105-110
Athabaska	Canada	3,085	....	195	690
Reindeer	Canada	2,435	....	155	....
Issyk-Kul	U.S.S.R.	2,230	....	115	5,400
Koko-Nor	Tibet	2,200	....	68	10,000
Vänern (Vener)	Sweden	2,149	292	87	144
Van	Turkey	2,000	....	80	5,260
Winnipegosis	Canada	2,000	38	122	828
Bangweulu	East central Africa	1,900	15	60	3,740
Urmia	Iran	1,750	50	80-90	....
Manitoba	Canada	1,711	....	120	810
Dubawnt	Canada	1,700	....	65	....
Albert	Uganda, Africa	1,640	55	100	2,037
Great Salt	United States	1,500	....	75	4,202

Emeralds were once believed to be beneficial to the eyes and amethysts were thought to prevent drunkenness. The belief in lucky stones still exists.

Ireland is not the only land that has no snakes. There are other snakeless regions in the world, including New Zealand and the Azores.—*Encyc. Brit.*

World Extremes of Climate

Highest recorded temperature:

World: 136° F. at Azizlia, Libya, North Africa, September 13, 1922.

United States: 134° F. at Death Valley, California, July 10, 1913.

Lowest recorded temperature:

World: -90° F. at Verkhoyansk, Siberia, U.S.S.R., February 5 and 7, 1892.

United States: -66° F. at Yellowstone Park, Wyoming; February 9, 1933.

Highest mean annual temperature:

86° F. at Massawa, Eritrea, Africa

Lowest mean annual temperature:

-14° F. at Framheim, Antarctica

Maximum rainfall for 24-hour period:

46 inches at Baguio, Luzon, Philippines, July 14-15, 1911.

Maximum recorded rainfall in one month:

241 inches at Cherrapunji, India, August 1841 (over 150 inches fell in 5 consecutive days). Average annual rainfall is 426 inches.

Minimum recorded rainfall:

World: .05 inch at Iquique, Chile, average yearly fall during 25 years.

United States: 3.93 inches at Bagdad, California, the total for five years, 1909-1913.

Average annual precipitation for the United States is about 29 inches.

Louisiana is the wettest state, with an annual average of 55.11 inches.

Nebraska is the driest state, with an annual average of 8.81 inches.

Highest local average annual rainfall in the United States was 150.73 inches at Wynnocsee

Oxbow, Washington, 13-year record.

Greatest 24-hour rainfall in the United States was 23.22 inches at New Smyrna, Florida, October 10-11, 1924.

Heavy snowfall records include 60 inches in one day at Giant Forest, California; 42 inches in 2 days at Angola, New York; 54 inches in 3 days at The Dalles, Oregon; and 96 inches in 4 days at Vanceboro, Maine. Greatest seasonal snowfall was 884 inches, over 73 feet, at Tamarack, California, during 1906-07.

Languages of the World

Language	Number speaking	Language	Number speaking
American Indian	500,000	Gypsy	500,000
Arabic	25,000,000	Greek	5,500,000
Australian Aboriginal	150,000	Hindustani	90,000,000
Basque	500,000	Hungarian (Magyar)	20,000,000
Bengali	50,000,000	Italian	40,000,000
Bulgarian	4,500,000	Japanese	55,000,000
Burmese	7,000,000	Malay	1,000,000
Chinese	430,000,000	Oceanic (Polynesian and Melanesian)	50,000,000
Czech	8,500,000	Persian	10,000,000
Danish, Icelandic, Norwegian, and Swedish	12,000,000	Polish	30,000,000
Davidian	65,000,000	Portuguese	37,000,000
Dutch	10,000,000	Pushtu	5,000,000
English	180,000,000	Rumanian	16,000,000
Finnish	30,000	Russian	85,000,000
German	100,000(?)	Siamese	5,000,000
Hebrew	3,000,000	Singhalese	3,000,000
Hindi	45,000,000	Spanish	65,000,000
Irish Gaelic (Irish and Scottish)	600,000	Turkish	7,000,000
German	80,000,000	Welsh	2,000,000

The word "eavesdropper" is derived from "eavesdrop," meaning the width of ground around a house or building which receives the rain water dropping from the eaves. A person who stood within the "eavesdrop" of a house—close enough to pry into others' business or listen to secrets—is called an "eavesdropper."

Crop failures are more likely to occur in India than in any other country in the world because of its tropical location and dependence on monsoon rains. Famine occurs in some portion of India every year, with widespread suffering every five or ten years and severe famine every 50 or 100 years.—*Encyc. Brit.*

The Seven Wonders of the World

Conferred upon a group of works of art which gained pre-eminence during the Alexandrian era.

THE PYRAMIDS OF EGYPT

A triumvirate of three structures, those of *Khufu*, *Khafra*, and *Menkaure*, which are located at Gizeh, form the architectural group that is often called the first wonder of the world. The largest pyramid, built by Cheops, has an original height estimated to be about 482 feet with a base that covers nearly 13 acres. The inner sepulchral chambers which are reached by passageways leading from the east, were designed to be the final resting place of the King only, and were never intended to be a family monument. The pyramid of *Khufu* is estimated to have been built in the years 2900 to 2877 B. C.

THE HANGING GARDENS AT BABYLON

These gardens are associated with Semiramis, a mythical Assyrian Queen who was reputed to have built the city of Babylon. The gardens cover and overhang the *zigurat* (the flattened portion at the top of a pyramid generally used as a place of worship) which was supposedly built by Nebuchadnezzar to gratify his Median Queen. The structure is said to have been about seventy-five feet high.

THE STATUE OF ZEUS (JUPITER) AT OLYMPIA

The statue of "The Father of Gods and Men" was wrought by Pheidias who is considered to have been the greatest of Greek sculptors. The only trace of the statue is to be found on copies of coins of the time and it is surmised that the god was seated on a throne, his body carved in ivory and his robe sculpted in gold.

The two-day eruption of the volcano Krakatoa, Netherlands Indies, 1883, was so violent that actual sounds of the explosion were heard nearly 3,000 miles away. This distance is the greatest at which sound waves have ever been perceived. Dust, stones and ashes were shot up into the air more than 17 miles, and a remarkable series of red sunsets appeared all over the world, caused by the spread of fine volcanic dust through the atmosphere.

The production of cheese is the earliest form of dairy manufacturing. Recognizing the strength-giving properties of cheese, the Jews and the Romans fed it to their armies, and the Greeks gave it to wrestlers to increase their endurance.

THE TEMPLE OF ARTEMIS (DIANA) AT EPHESUS

Built by one of the family of Tarquins who ruled in the celebrated Etruscan era in the history of Rome. The temple was constructed on the *Aventine*, one of the famous 7 hills of ancient Rome.

THE MAUSOLEUM AT HALICARNASSUS

Erected by Queen Artemisia in 353 B. C. in memory of her husband, King Mausolus of Caria in Asia Minor. Some remains of this monument were brought to England in 1859 by Sir Charles Newton and placed in the British Museum. The structure originated the word that is now used to mean a monument erected to receive the remains of a deceased person.

THE COLOSSUS AT RHODES

A statue of Helios (Apollo), about 12 feet high and constructed by the sculptor Chares in 280 B. C. The work was reputed to have taken the sculptor twelve years to complete and was supposedly situated in the harbor of the city. The statue was thrown down by an earthquake in 22 B. C. and the remains were sold some 100 years later for the purposes of making instruments of war.

THE PHAROS OF ALEXANDRIA

On the eastern point of Pharos Island, King Ptolemy Philadelphus commissioned Sostratus of Caria to build the famous lighthouse which became the prototype for all future lighthouses. The structure was claimed to be 400 feet high.

Perhaps the world's most remarkable tree is the Moriche palm of Venezuela. Its fruit is edible and its juice is made into beer. Its sap is made into wine and its pith into bread. Its leaves furnish an excellent thatch and the fiber extracted from their midribs is used for fishlines, cordage, hammocks and nets. Its wood is hard and makes good building material.

The entire Chinese language is made up of words of one syllable. Each sound may have ten or more different meanings, and the language has no rules of grammar.

Two hundred different crimes were punishable by death under English law at the time that America was colonized.—*Encyclopaedia Brit.*

Ancient Empires

The *Egyptian and Babylonian* empires, near Eastern civilizations whose cultures mark the beginning of written history, had their origins in the nebulous period of ancient history prior to the year 4000 B.C. They developed rapidly in the fertile river valleys of the Nile in Egypt and the Tigris-Euphrates in Mesopotamia after the discovery of metals and the invention of writing. Their governments were all-powerful, with the people subjugated and without political rights. The Egyptians regarded their king as a god. In Babylon, the ruler was a priest-king, earthly representative of the gods. Nevertheless, these Near Eastern cultures made great contributions in the eternal march of man; they advanced the ways of making and doing things, produced the earliest literature, developed the principles of law (the code of Hammurabi, Babylonian king of the 20th century B.C., the oldest code of law) and science, learned the basic principles of art, and evolved early religious worship.

The influence of Babylon and Egypt was felt in the rise of the Semitic tribes of Syria, the Hittites in Asia Minor, and the people of the Aegean region. Between the years 1200 and 800 B.C., the small Syrian states grew to great power and then were overwhelmed by the great empire of the Assyrians, the warlike peasants of the Tigris valley, who took the lessons learned from the Babylonians and spread that culture over their domains. The Assyrians, like the Egyptians and the Babylonians, in turn fell under the power of the Persians in the century between 600 and 500 B.C. By 525 B.C., the Persian Empire extended from India to Egypt, the greatest the world had ever seen.

The lessons learned by these early Near Eastern civilizations were transmitted to Greece, which developed its illustrious empire in the Aegean region, after the inhabitants of the island of Crete had absorbed the Egyptian culture. The mainland Greeks overthrew the Cretans and in turn were succeeded by the Doric Greeks, who read their culture across the Aegean, the Asia Minor coast, and into the Mediterranean and Black Sea regions. The characteristic Greek political institution was the city-state, first ruled by kings and often temporary monarchical tyrannies, and finally by the participation of free citizens. Thus the Greeks developed the theory of the dignity of the free man. This political growth resulted eventually in the establishment of the Athenian democracy. Literature and the arts flourished, and by the

5th century B.C., when Athens became the great city of the Greeks, drama had risen to full maturity with the great tragedies of Sophocles and Euripides and the comedies of Aristophanes. Architecture and art advanced apace. The Greeks, learning much from their Egyptian teachers, produced such superb buildings as the Parthenon and created amazingly beautiful statues through the use of living models. Religion, which was closely linked with art, also flourished, as did the development of philosophy, under the great Socrates (469-399 B.C.), Plato (427-347 B.C.), and Aristotle (384-322 B.C.). Wars weakened the city-states, and finally they fell to the Macedonians under Alexander the Great in the 4th century B.C. Alexander also conquered the vast Persian empire.

Last among the great ancient empires was the *Roman*, which developed in Italy and gained control over the Mediterranean region after absorbing the culture of Greece and combining with it new principles of law and art and teaching their new learning to the West. The development of the Roman civilization began in the year 500 B.C., when the peoples on the peninsula of Italy freed themselves from the rule of the Etruscans. The Romans, with a republican form of government, speedily conquered Italy and the Mediterranean region, and the Roman governors became men of great wealth, corrupting the city-state system and making it a graft-ridden machine of exploitation. The failure of the government to check this self-seeking influence brought on a revolt which resulted eventually in the rise of Julius Caesar to dictatorship in 46-44 B.C. Caesar's murder in the Senate at Rome was followed by the establishment of the one-man rule of Augustus over the Roman Empire. The Near Eastern, Greek and Roman cultures blended, and the empire was welded together in universal loyalty to the emperor. Legal practices were developed and became the foundations of modern law. Industry and trade were advanced and extended to China and India. Great roads, bridges and buildings were constructed, and literature attained a new peak with the *Aeneid* of Vergil and the writings of Horace, Seneca, and Juvenal. Stoic philosophy was taught by Marcus Aurelius, the philosopher-emperor, and Judaism spread, to be followed by Christianity. The political structure of this last of the great civilizations of ancient times began to crumble in the 3d century A.D., with civil wars for the imperial throne.

Paintings and scrolls on the walls of Chinese homes are changed periodically to keep them in harmony with the seasons.

An organized system of Shorthand was developed and used by the Romans as far back as 63 B. C.—*Encyc. Brit.*

Explorations and Discoveries

Continent and country or place	Event	Explorer or discoverer	Date
AFRICA—			
African continent	Circumnavigated	Phoenicians	600 B.C.
Sierra Leone	Visited	Hanno, Carthaginian seaman	470 B.C.
Congo River	Discovered	Cao, Portuguese navigator	1484 A.D.
Cape of Good Hope	Doubled	Bartholomew Diaz, Portuguese navigator	1488
Abyssinia	Visited	Covilhao, Portuguese envoy	1490
Gambia River	Explored	Mungo Park	1795
Sahara Desert	Crossed	Denham and Clapperton, English explorers	1822
Zambesi River	Discovered	Livingstone, Scottish explorer	1851
Victoria Falls	Discovered	Livingstone	1855
Sudan	Explored	Barth, German explorer	1856
Lake Tanganyika	Discovered	Burton and Speke, British explorers	1858
Congo River	Traced	Stanley, British explorer	1877
ASIA—			
Punjab, India	Visited	Alexander the Great, of Greece	327 B.C.
China	Visited	Al Masudi, Arab Traveler	920 A.D.
India	Visited	Benjamin of Tudela, Spaniard	1160
Karakorum	Visited	Friar John of Carpini	1246
China	Visited	Marco Polo	1270
Tibet	Visited	Odoric, Italian monk, at Lhasa	1320
Southern China	Explored	Conti, Italian adventurer	1440
India	Visited by Cape route	Vasco da Gama, Portuguese	1497
Japan	Visited	St. Francis Xavier of Spain	1549
White Sea (Russia)	Reached	Chancellor, English navigator	1553
Persia (now Iran)	Reached	Jenkinson, English traveler	1561
Central Asia	Crossed	Goes, native of Azores	1605
Arabia	Explored	Niebuhr, German explorer	1761
China	Explored	Richthofen, German scientist	1868
Mongolia	Explored	Przhevalski, Russian explorer	1873
Central Asia	Explored	Hedin, Swedish scientist	1890-1908
EUROPE—			
Ireland	Visited	Himilco, Carthaginian merchant	500 B.C.
Shetland Islands	Visited	Pytheas of Marseilles	320 B.C.
North Cape	Rounded	Ottar, Norwegian explorer	852 A.D.
Iceland	Colonized	Norwegian vikings	930
NORTH AMERICA—			
Greenland	Colonized	Eric the Red (Thorvaldson), discoverer	982 A.D.
Labrador	Discovered	Leif Ericsson, Norwegian explorer	1000
San Salvador	Discovered	Christopher Columbus, Italian navigator	1492
North America	Coast discovered	John Cabot, for British	1497
Pacific Ocean	Discovered	Balboa, Spanish explorer	1513
Florida	Explored	Ponce de Leon, Spanish explorer	1513

Continent and country or place	Event	Explorer or discoverer	Date
Mexico	Conquered	Cortez, Spanish adventurer	1518
Gulf of St. Lawrence	Discovered	Cartier, French navigator	1534
Southwest U. S.	Explored	Coronado, Spanish explorer	1539-42
Colorado River	Discovered	Alarcon, Spanish explorer	1540
Grand Canyon	Discovered	Cardenas, Spanish explorer	1540
Mississippi River	Discovered	De Soto, Spanish explorer	1541
Frobisher Bay	Discovered	Frobisher, English seaman	1553
Maine Coast	Visited	Champlain, French explorer	1604
Chesapeake Bay	Visited	Smith, English colonist	1608
Hudson River	Explored	Hudson, English navigator	1609
Baffin Bay	Discovered	Baffin, English navigator	1616
Hudson Bay, Canada	Discovered	Hudson	1610
Lake Michigan	Navigated	Nicolet, French explorer	1634
Arkansas River	Discovered	Marquette and Joliet, French explorers	1673
Mississippi River	Explored	La Salle, French explorer	1682
Bering Strait	Discovered	Bering, Danish explorer	1728
Alaskan Coast	Explored	Gwosdef, Russian sailor	1731
MacKenzie River (Canada)	Discovered	McKenzie, Scottish explorer	1789
Northwest U. S.	Explored	Lewis and Clark	1804-06
Yellowstone Park	Discovered	Colter, American pioneer	1807
Mammoth Cave	Discovered	Hutchins, American explorer	1809
Great Salt Lake	Discovered	James Bridger, American explorer	1824
Grinnell Land	Discovered	Kane, American explorer	1853
Northeast Passage (Arctic Ocean)	Accomplished	Nordenskjold, Swedish explorer	1879
Greenland	Explored	Peary, American explorer	1892
Northwest Passage	Navigated	Roald Amundsen, Norse navigator	1906
SOUTH AMERICA—			
Continent	Discovered	Amerigo Vespucci, Italian navigator	1497
Brazil	Discovered	Cabral, Portuguese explorer	1500
Peru	Conquered	Pizarro, Spanish adventurer	1532
Amazon River	Explored	Orellana, Spanish explorer	1541
Cape Horn	Discovered	Schouten, Dutch navigator	1616
OCEANIA—			
Western Australia	Sighted	Portuguese sailors	1601
New Guinea	Explored	Torres, Spanish navigator	1606
Australia	Visited	Hartog, Dutch explorer	1616
Tasmania	Visited	Tasman, Dutch navigator	1642
Australia	Crossed	Sturt, English explorer	1828
Australia	Explored	Burke and Wills, Irish explorers	1861
MISCELLANEOUS—			
Ocean exploration	Expedition	Magellan's ships circumnavigate the globe	1521-22
Spitzbergen (Arctic Europe)	Visited	Barents, Dutch navigator	1594
Antarctic Circle	Crossed	Cook, English navigator	1773
Antarctica	Discovered	Bellingshausen, Russian navigator	1821
Antarctica	Explored	Wilkes, American explorer	1840
North Pole	Discovered	Peary, American explorer	1909
South Pole	Discovered	Roald Amundsen, Norse navigator	1911

Longitude and Latitude of Foreign Cities—by Continents

City	Long.	Lat.	City	Long.	Lat.
	° /	° /		° /	° /
Nome, Alaska	165 30 w	64 25 n	Munich, Germany	11 35 e	48 8 n
Sitka, Alaska	135 15 w	57 10 n	Zurich, Switzerland	8 31 e	47 21 n
Honolulu, Hawaiian Is.	157 50 w	21 18 n	Milan, Italy	9 10 e	45 27 n
Chihuahua, Mexico	106 5 w	28 37 n	Venice, Italy	12 20 e	45 26 n
Mexico, Mexico	99 7 w	19 26 n	Rome, Italy	12 27 e	41 54 n
Vera Cruz, Mexico	96 10 w	19 10 n	Naples, Italy	14 15 e	40 50 n
Panama, Panama	79 32 w	8 58 n	Warsaw, Poland	21 0 e	52 14 n
Havana, Cuba	82 23 w	23 8 n	Prague, Czechoslovakia	14 26 e	50 5 n
Kingston, Jamaica	76 49 w	17 59 n	Vienna, Austria	16 20 e	48 14 n
San Juan, Porto Rico	66 10 w	18 30 n	Budapest, Hungary	19 5 e	47 30 n
Bogota, Colombia	74 15 w	4 32 n	Belgrade, Yugoslavia	20 32 e	44 52 n
Caracas, Venezuela	67 2 w	10 28 n	Bucharest, Romania	26 7 e	44 25 n
Georgetown, Br. Guiana	58 15 w	6 45 n	Sofia, Bulgaria	23 20 e	42 40 n
Paramaribo, Surinam	55 15 w	5 45 n	Athens, Greece	23 43 e	37 58 n
Cayenne, Fr. Guiana	52 18 w	4 49 n	Leningrad, U. S. S. R.	30 18 e	59 56 n
Guayaquil, Ecuador	79 56 w	2 10 s	Moscow, U. S. S. R.	37 36 e	55 45 n
Lima, Peru	77 2 w	12 0 s	Saratov, U. S. S. R.	46 0 e	51 31 n
Belem, Brazil	48 29 w	1 28 s	Odessa, U. S. S. R.	30 48 e	46 27 n
Sao Salvador, Brazil	38 27 w	12 56 s	Algiers, Algeria	3 0 e	36 50 n
Rio de Janeiro, Brazil	43 12 w	22 57 s	Tripoli, Libya	13 12 e	32 57 n
Sao Paulo, Brazil	46 31 w	23 31 s	Cairo, Egypt	31 21 e	30 2 n
La Paz, Bolivia	68 22 w	16 27 s	Dakar, French W. Africa	17 28 w	14 40 n
Asuncion, Paraguay	57 40 w	25 15 s	Leopoldville, Bel. Congo	15 17 e	4 18 s
Montevideo, Uruguay	56 10 w	34 53 s	Addis Ababa, Ethiopia	38 49 e	9 2 n
Iquique, Chile	70 7 w	20 10 s	Nairobi, Kenya	36 55 e	1 25 n
Santiago, Chile	70 45 w	33 28 s	Johannesburg, Un. of S. Africa	28 4 e	26 12 s
Cordoba, Argentina	64 10 w	31 28 s	Durban, Un. of S. Africa	30 53 e	29 53 s
Buenos Aires, Argentina	58 22 w	34 35 s	Capetown, Un. of S. Africa	18 22 e	33 55 s
Reykjavik, Iceland	21 58 w	64 4 n	Tananarive, Madagascar	47 33 e	18 50 s
Belfast, N. Ireland	5 56 w	54 37 n	Irkutsk, Sib., U. S. S. R.	104 20 e	52 30 n
Dublin, Eire	6 15 w	53 20 n	Vladivostok, U. S. S. R.	132 0 e	43 10 n
Aberdeen, Scotland	2 9 w	57 9 n	Peiping, China	116 25 e	39 55 n
Edinburgh, Scotland	3 10 w	55 55 n	Nanking, China	118 53 e	32 3 n
Glasgow, Scotland	4 15 w	55 50 n	Shanghai, China	121 28 e	31 10 n
Newcastle-on-Tyne, Eng	1 37 w	54 53 n	Chungking, China	106 34 e	29 46 n
Leeds, England	1 30 w	53 45 n	Canton, China	113 15 e	23 7 n
Manchester, England	2 15 w	53 30 n	Manila, Philippine Islands	120 57 e	14 35 n
Liverpool, England	3 0 w	53 25 n	Bangkok, Thailand	100 30 e	13 45 n
Birmingham, England	1 55 w	52 25 n	Singapore, Br. Malaya	103 55 e	1 14 n
London, England	0 5 w	51 32 n	Rangoon, Burma	96 0 e	16 50 n
Bristol, England	2 35 w	51 28 n	Calcutta, India	88 24 e	22 34 n
Plymouth, England	4 5 w	50 25 n	Bombay, India	72 48 e	19 0 n
Hammerfest, Norway	23 38 e	70 38 n	Mecca, Arabia	39 45 e	21 29 n
Oslo, Norway	10 42 e	59 57 n	Ankara, Turkey	32 55 e	39 55 n
Stockholm, Sweden	18 3 e	59 17 n	Tokyo, Japan	139 45 e	35 40 n
Helsinki, Finland	25 0 e	60 10 n	Nagoya, Japan	136 56 e	35 7 n
Copenhagen, Denmark	12 34 e	55 40 n	Osaka, Japan	135 30 e	34 32 n
Lisbon, Portugal	9 9 w	38 44 n	Nagasaki, Japan	129 57 e	32 48 n
Madrid, Spain	3 42 w	40 26 n	Darwin, N. Terr., Australia	130 51 e	12 28 n
Barcelona, Spain	2 9 e	41 23 n	Brisbane, Queens, Australia	153 8 e	27 29 s
Marseille, France	5 20 e	43 20 n	Sydney, N. S. W., Australia	151 0 e	34 0 s
Bordeaux, France	0 31 w	44 50 n	Melbourne, Victoria, Australia	144 58 e	37 47 s
Lyon, France	4 50 e	45 45 n	Adelaide, So. Australia	138 36 e	34 55 s
Paris, France	2 20 e	48 48 n	Perth, Western Australia	115 52 e	31 57 s
Bruxelles, Belgium	4 22 e	50 52 n	Hobart, Tasmania	147 19 e	42 52 s
Amsterdam, Netherlands	4 53 e	52 22 n	Auckland, New Zealand	174 45 e	36 52 s
Bremen, Germany	8 49 e	53 5 n	Wellington, New Zealand	174 47 e	41 17 s
Hamburg, Germany	10 2 e	53 33 n	Batavia, Java, Nether. Indies	106 48 e	6 16 s
Berlin, Germany	13 25 e	52 30 n	Makassar, Celebes, Nether. Indies	119 30 e	5 9 s
Frankfurt, Germany	8 41 e	50 7 n	Port Moresby, Papua Ter.	147 8 e	9 25 s

MUSEUMS OF THE WORLD

Source: Encyclopaedia Britannica.

The museum, as it is now known, originated in the Renaissance when the revival of interest in the arts and classical antiquity led princes, nobles and humanists to amass specimens of historical value and to house their collections in special buildings or galleries.

However, as dilettantism, rather than purely scientific interest motivated the collectors, little method was shown in classifying and cataloguing the data, which were thrown together haphazardly. In the latter part of the 19th century, many museum curators started the task of systematizing collections. In recent years, efforts also were made to attract the public by modernizing the interiors of museums, thus attempting to remove the popular misconception that museums were merely repositories for objects of the dead past.

In the 20th century, the United States attracted a great deal of valuable objects of art and antiquity as well as world-famous paintings.

World Art Museums

Among the more important world art museums are:

The British Museum, in London, has two principal divisions—the Library and Department of Antiquities. Its library is one of the largest in the world, and contains such outstanding treasures as the Codex Alexandrius of the Greek Bible, the best collection of Greek papyrus from Egypt and vast collections of original historical manuscripts of incalculable historical value. In the Department of Antiquities are some of the famous historical art works of the world, including the Elgin Marbles and the Rosetta Stone, to mention only a few.

Victoria and Albert Museum, London, whose primary object is to furnish examples to illustrate the history of art, with emphasis on architecture and sculpture, ceramics, engraving, book production, paintings, textiles, etc. It contains about 550,000 volumes and 250,000 photographs.

National Gallery, London, contains a great number of old Masters, including paintings by De Vinci, Michelangelo, Pintoretto, Mantegna, Titian, Bellini, Van Dyck, Rubens, Rembrandt, Holbein, Constable and Turner.

Wallace Collection, London, bequeathed to the government in 1897 by the widow of Sir Richard Wallace, contains many objects of art and curios of French origin and first-

rank canvases and etchings of Italian, Spanish, Flemish, Dutch and English schools.

Walker Art Gallery, Liverpool, includes many examples of drawings, paintings, sculptures, water colors and etchings dating from the 13th to the 20th centuries.

In France, the most famous gallery is the *Louvre* in Paris, noted for the magnificence of its architecture as well as for its art collection which is the largest in the world. Other French museums of importance are *Cluny*, *Luxembourg*, *Rodin*, *Guimet* and *Carnavalet*, all located in Paris.

Among the magnificent Italian museums, the *Museo Nazionale* at Naples contains the best arranged and best classified collection in Italy. The *Uffizi Gallery* in Florence, founded by the Medicis, has one of the world's largest and best collections of Italian art. Other galleries in Florence are the *Pitti Palace*, the *Picture Gallery*, the *Academy of Fine Arts* and the *National Museum*. Rome has numerous museums and six well-known museums are located in the Vatican.

In Germany, the *Kaiser Friedrich Museum*, the *Old and New Museums* and the *Schloss Museums*, in Berlin, are perhaps the best known.

The *Royal Museum of Fine Arts* in Brussels has a fine collection of French, Flemish and Dutch masters and houses many canvases by Rubens, Van Dyck, Jordaens, Rembrandt, Frans Hals and Jan Steen.

The *State Museum* in Amsterdam contains superb works by Rembrandt, Vermeer and others.

Among the notable museums in other countries of Europe are the world-famous art gallery *Museo del Prado* in Madrid; the *State Tretyakov Gallery* and the *Museum of Fine Arts*, Moscow; the *Tokyo Imperial Household Museum*, famed for its many Oriental paintings and examples of Oriental workmanship in lacquer, jade, ivory and metal. The *Nara Imperial Museum*, also in Tokyo, contained a representative collection of Japanese sculpture, paintings and archaeological and historical exhibits. The *Imperial Treasure House* in Nara Park is a wooden structure dating from about 752 A. D., containing treasures of religious and historical significance. Before World War II, only persons accredited by the emperor were permitted to view its treasures.

Science Museums

Scores of notable museums of science are found in the British Empire.

The *Ashmolean Museum*, the oldest in Great Britain, was built in 1679 by the University of Oxford and houses a collection of natural history objects and archaeological rarities. In 1860 its zoological and botanical collections were moved to the New University Museum. A collection of ancient mathematical instruments was added later.

Science Museum of London has exhibits of scientific instruments, apparatus, machines and appliances which review the progress of science and the history of invention.

Kew Gardens in London house a herbarium and an extensive botanical collection.

Other famous London museums of science are the *Hunterian Museum* of the Royal College of Surgeons devoted to anatomy—human and comparative—and to pathology; and the *Horniman Museum* which deals with zoology and anthropology (including archaeology and ethnology).

The *Liverpool Museum* contains valuable collections of natural history and antiques and is divided into departments of zoology, botany, geology, archaeology and ethnology.

The *Manchester Museum* serves as both a municipal museum and a university museum.

The *Bristol Museum* contains departments of geology, zoology, botany, archaeology and Bristol antiquities.

The *Natural History Museum* in Hull is but one of the many museums in that city. Others are *Wilberforce House*, *The Museum of Fisheries and Shipping*, the Mortimer collection of prehistoric antiquities, the *Museum of Commerce and Transport* and the *Folklore Museum*.

In Scotland are the famed *Royal Scottish Museum*, which has collections in art, ethnography, natural history, technology and geology; the *National Museum of Antiquities* of Scotland noted for its coin and manuscript collections. Both are in Edinburgh. In Glasgow are the *University of Glasgow Museum* and the *Zoological Museum*.

The *Science Museum* at Dublin and the one at Belfast have important science collections.

Calcutta has three noted museums: the *Indian Museum*, outstanding for its marine fauna and vertebrate fossils; the *Geological Museum* of the Government Survey of India and the herbarium of the *Royal Botanical Gardens*. In Bombay are the *Victoria* and *Albert Museum* and the museum of the *Bombay Natural History Society* which is mainly zoological.

In Australia are the *Queensland Museum*, Brisbane; the *Geological Survey Museum*, also at Brisbane; the *South Australian Museum*, Adelaide; and the *National Museum of Victoria* and the *National Herbarium of Victoria*, both at Melbourne.

New Zealand contains the *Canterbury Museum*, Christchurch, rich in local fauna, flora and geological items, and a Maori and Polynesian ethnological collection. The *Otago University Museum* of natural history and ethnology, the *War Memorial Museum* at Auckland and the *Colonial Museum* at Wellington are others of note.

The *South African Museums*, Capetown, hold general and local history collections and others illustrating anthropology, ethnology and colonial art. The *Durban Museum* contains much anthropological material; the *Rhodesian Museum*, Bulawayo, deals with the zoology, geology and botany of Rhodesia; and at Cairo are the Egyptian collections and at Gizeh the *Geological Survey Museum*.

In Europe, the most important museums are the *Muséum d'Histoire Naturelle* in Paris, the famous *Musée de Océanographie* in Monaco, the *Natural History Museum* in Lisbon, the *Rijks Museum* of geology, mineralogy and zoology at Leyden (Holland), the *Royal Museum of Natural History* at Stockholm, the *National Museum* at Copenhagen, the *Museo Civico* at Naples, the natural science museums in Bern, Geneva, Lausanne and Neuchâtel, the *Geological Survey Museum* at Athens, the *Imperial Natural History Museum* at Vienna, the *Musée Sociale* in Budapest, the *National Museum* of Prague, the *Imperial Academy of Sciences* at Leningrad, the *Rumiantsov Museum* in Moscow and the *Mining Museum* in Leningrad.

Famous science museums in Germany were: the *Museum für Naturkunde*, the *Ethnological Museum*, the *Anthropological Museum*, the *Mineralogical Museum* and the *Agricultural Museum*, all in Berlin; the *Natural History and Ethnological Museums* in Hamburg; and the *Deutsches Museum* in Munich.

Other museums of note are the *Constantinople Museum*, the *American University Museum* at Beirut, the museum attached to the *Imperial University* at Tokyo, the *Zi-Ka-Wei Museum* near Shanghai, the *National Museum* at Santiago (Chile), the *Bahia State Museum* in Brazil, the *Argentine National Museum of Natural History*.

The oldest scientific instrument is believed to be the Astrolabe. Invented by the Greeks 2,000 years ago, the astrolabe was used for telling time and latitude.—*Encyclopaedia Brit.*

LIBRARIES OF THE WORLD

Source: Encyclopaedia Britannica.

The collection of printed matter for reference and reading purposes is as old as civilization itself. Data unearthed by archaeologists disclose that libraries were tant in ancient Babylonia and Assyria. An excavation at Nineveh some 95 years ago unearthed clay tablets with cuneiform characters, indicating that Nineveh had a library of some 10,000 works and documents in tablet form.

Libraries existed in the days of the pharaohs. After papyrus replaced the bulky clay or stone slabs, libraries grew in size and importance in Egypt; early Egyptian records say there was an important library at Memphis.

It was customary for scholars in ancient Greece to have libraries. In the great libraries of Alexandria (estimates as to the number of volumes ran from 42,000 to 100,000), the works were classified and catalogued. The Alexandria libraries were destroyed in 640 A. D.

The libraries of Rome were frequently augmented by volumes brought home from foreign wars as loot by the Roman legions. Private libraries were famed and Cicero and Atticus were zealous in building up their own private collections. A public library dedicated to the public was located on Mount Aventine and in the 4th century there were said to have been 28 public libraries in Rome.

The mediaeval period saw the growth of several libraries among private collectors in Gaul. The Irish monasteries were the repositories of numerous volumes. Charlemagne and Pope Sylvester II were great private collectors. The spread of Catholicism throughout Europe also saw the growth of libraries. As the monastic orders were virtually the sole producers and reproducers of books, the monasteries became famed repositories of the early illuminated works. Virtually all monasteries had libraries, the most famous of which were founded by the Benedictine, Augustinian and Dominican orders. In Italy the most important monastic library was lodged at Monte Cassino which was destroyed by the Saracens in the 9th century.

The Arabs too had many excellent libraries. Greek texts were translated into Arabic and colleges and libraries arose everywhere throughout the Islamic world, notably at Baghdad, Cordova, Cairo and Tripoli.

In the Renaissance the collection of books was avidly pursued by the wealthy princes and nobles. Charles V of France collected, for those days, a formidable library of 910 volumes. Cosimo de Medici laid the foundation of a great library in Florence. Other Italian noblemen also

amassed scores of volumes. But it took the invention of the printing press by Gutenberg and the development of this labor-saving device really to give impetus to the growth and spread of libraries.

Among the great libraries of the world, the *British Museum* ranks among the first. It has about 3,750,000 printed volumes and about 56,000 manuscripts. The shelves required to house this massive amount of material measure 55 miles.

Perhaps the finest library in the world is the *Bibliothèque Nationale* in Paris. In the year 1943 an inventory disclosed that it had some 4,500,000 volumes, 122,000 manuscripts and 500,000 maps and plans contained in 28,000 volumes.

The *State Library* in Berlin, founded in 1661, had about 2,130,000 volumes and 56,810 manuscripts. The *State Library* at Munich, founded by Duke Albrecht V of Bavaria, had 1,670,000 books and some 50,000 manuscripts.

The *Nationalbibliothek* in Vienna has 1,250,000 volumes and 27,000 manuscripts as well as a collection of 100,000 priceless papyrus.

While not as large as some of the state libraries in other countries the *Biblioteca Vaticana* has many priceless old manuscripts bequeathed to the Vatican over the centuries. The printed books number about 600,000 volumes, the incunabula about 6,000 and the manuscripts about 50,000.

Two of the more important Italian libraries are the *Biblioteca Nazionale* at Naples which has about 1,000,000 volumes and 11,868 manuscripts; and the *Biblioteca Nazionale Centrale* at Florence which houses 2,000,000 volumes, manuscripts and pamphlets.

Other famed libraries in Europe are the *Bibliothèque Royale* at Amsterdam, 1,000,000 volumes; the *Biblioteca Nacional* at Madrid, 1,210,520 volumes; *Biblioteca Nacional* at Lisbon, 500,000 volumes and 150,000 manuscripts; and the *University Library* at Oslo, 850,000 volumes.

One of the largest libraries in the world is the *Gosudarstvennaya Publichnaya Biblioteka* at Leningrad (formerly the Imperial Public Library, at St. Petersburg); the state library of the U. S. S. R., it is said to contain 5,000,000 volumes, 240,000 manuscripts and autographs and has many collections of priceless historical documents.

The second largest library in the Soviet Union, the *Lenin Memorial Library* in Moscow has more than 3,900,000 printed volumes and many invaluable early printed books and manuscripts.

In the Far East, the most extensive libraries are found in Japan. The Imperial cabinet at Tokyo has some 507,600 volumes, consisting mostly of government documents.

The United States

The earliest libraries in the Colonial era were privately owned although in 1731 Benjamin Franklin projected the first subscription library in Philadelphia. Endowments helped to set up many of the large libraries, although many of these institutions are now receiving state or municipal support.

The largest library in the United States is the *Library of Congress*, established in 1880 by an act of Congress. In 1943, it contained 5,395,000 books and pamphlets, and ranked as the largest library in the world. While it extends its services for members of Congress and other government departments, it also offers excellent facilities for the serious scholar. It also performs the function of a national library by extending bibliographic and other services to all other libraries in the country.

The *New York Public Library*, with its 3,730,000 volumes, is the largest public library in the world. There are two important reference libraries in Chicago, the *Newberry* with about 450,000 volumes and the *John Crerar* with more than 820,000 volumes.

Other large public libraries are the Boston Public Library, 1,683,000 volumes; Cleveland Public Library, 1,920,000 volumes; Chicago Public Library, 1,565,000 volumes; Los Angeles Public Library, 1,491,000; Cincinnati Public Library, 1,130,000 and the Brooklyn Public Library, 1,108,000.

The growth of libraries attached to colleges and universities in the United States has been phenomenal and some of the university libraries are among the largest in the country. Among them are (total volumes in parentheses): Harvard University (4,702,000), Yale University (3,432,000), Columbia University (about 2,000,000), California University, including its eight schools (3,964,000), University of Chicago (1,500,000), Cornell University (1,187,000), University of Illinois (1,964,000), University of Michigan (1,240,000), University of Minnesota (1,327,000), University of Pennsylvania (1,013,000), Princeton University (1,000,000), Northwestern University (848,000), Brown University (723,000), Duke University (722,000), Johns Hopkins University (718,000), New York University (687,000), Ohio State University (644,000), Stanford University (920,000).

In Canada, the most important public library is that of Toronto, which has more than 400,000 volumes. Extensive libraries attached to the universities are Queen's University (211,000), McGill University (433,000), and Laval (760,000).

UNIVERSITIES

ANCIENT AND MODERN

Source: Encyclopaedia Britannica.

Universities, in the modern sense of the term, sprang up in the 12th and 13th centuries in response to the resurgence of learning that just preceded the Renaissance in Europe. Procedure at the early universities was informal, with students merely gathering at some place in a city to listen to a pre-eminent teacher lecture. There were no campuses, buildings or endowments. Actually, the term "university," meant at one time a guild or a corporation; there were, in the medieval period, "universities" of bootmakers, weavers, etc. Thus the university of learning was merely patterned along the same line as the guilds. The students filled the role of apprentices and the teachers were the masters.

At first, the universities were only locally renowned. Then as the teachers became known beyond national frontiers and the term university came to have a more definite and technical significance, the popes and kings granted the institutions charters giving them legal status and attending students were exempted from military

service and made independent of the jurisdiction of the townspeople.

The first European university was that of Salerno which had its origins in the 9th century when it was known as a school of medicine. In the 11th century, it became one of the most famous medical schools of Europe.

University of Bologna. Organized in 1158 by students as a means of protection against the merchants and citizens of Bologna who raised their prices of foodstuffs and lodgings, the University of Bologna was famous for its legal scholars. The students were organized into two guilds and exercised a great deal of authority in managing not only the administration of the university but the professors themselves and controlled all academic matters, save the granting of degrees.

Other Italian universities famed in the mediaeval era included those at Modena, Vicenza, Padua, Naples, Pavia, Arezzo, Perugia, Florence, Siena and Ferrara.

The University of Paris. This institution and its origin in a cathedral school on the Île de la Cité, but later moved to the left bank of the Seine, although still under the authority of the chancellor of Notre Dame. It was established sometime between 1150 and 1170, developed into the most famous continental center of learning in its day and became the model for Oxford and Cambridge universities. The three principal schools at Paris were theology, medicine and law. By the 14th century, the University of Paris had some 40 colleges of which the Sorbonne became the most celebrated.

The universities of Paris and Bologna had a marked influence in the subsequent creation of other university centers. About 1200 there was a migration of students from Paris to Oxford and a decade or two later, from Oxford to Cambridge.

Other famous universities of the Middle Ages include the *University of Toulouse* (1223), *Orleans* (1305), *Valladolid* (1346), *Salamanca* (1243), *Seville* (1254), *Coimbra* (1537), *Prague* (1347), *Krakow* (1364), *Munich* (1364), *Heidelberg* (1385), *Cologne* (1388), *Erfurt* (1379), *Budapest* (1475), *Paris* (1426), *Leipzig* (1409), *Rostock* (1419), *Freiburg* (1455) and *Tübingen* (1477).

The Renaissance

The Renaissance gave fresh impetus to the universities of Europe. Almost concurrent with the decline of feudalism was the rise of the universities. In France three new universities of importance arose in the 15th century—the *University of Aix* (in Provence); the *University of Poitiers* (1431), in which learning took on a more secularized and less Anglicized tone in conformity with the new spirit of rising nationalism; and the *University of Caen* (1437), founded under English auspices, but later becoming French after the expulsion of the English.

Other French institutions of note that rose in this era were at *Bordeaux* (1441), *Valence* (1452), *Nantes* (1463) and *Bourges* (1465); and new universities on the continent were founded at *Basel* (1460), *Ingolstadt* (1459), *Trier* (1450), *Mainz* (1476), *Uppsala* (1477), *Copenhagen* (1479), *Wittenberg* (1502) and *Frankfurt on the Oder* (1506).

St. Andrew, founded in 1411, was the first university in Scotland. Others were the *University of Glasgow* (1453), the *University of Aberdeen* (1494) and the *College of Edinburgh* (1582).

In Spain, new universities were *Valencia* (1501); *Seville* (1505); *Santiago* (1526); *Granada* (1531) and *Oviedo* (1574).

Reformation and Post-Reformation

Until the period of the Reformation, most of the institutions of higher learning

in Europe were under the tutelage of the Catholic Church. During this period many established universities declared their independence of the Roman Catholic Church. Cromwell's rule brought about new scholastic methods at both Oxford and Cambridge and the establishment of new colleges thoroughly imbued with Protestantism.

But the first Protestant university was that of *Marburg*, founded in 1527. Its land and buildings were made up of property confiscated from the religious orders in the Hessian capital. Other Protestant universities were: *Königsberg* (1544); *Jena* (1575); *Helmstedt* (1575); *Altdorf* (1575); *Giessen* (1607); *Strasbourg* (1621) and *Halle* (1693).

18th, 19th and 20th Century Universities

Among the more famous institutions in this era was *Göttingen* (1736) whose school of history became celebrated throughout Europe. Others were *Erlangen* (1743); *Berlin* (1809); *Bonn* (1818); *Helsingfors* (1826); *University of Lemberg* (Lwów), founded in 1816; the *National University at Athens* (1837); *Tokyo* (1868); *Kyoto* (1897); *Bucharest* (1864); *Sofia* (1888); *Constantinople* (or *Stamboul*) (1900).

Among the more famous British universities established in the 19th and 20th centuries are the *University of London* (1825); *Manchester* (1851); *Liverpool* (1881); *Leeds* (1904); the *Mason University College* at Birmingham (1900) and the *University College* at Sheffield (1905). The *University of Wales* is composed of colleges at Aberystwyth, Bangor, Cardiff and Swansea.

There are many important and large universities in the British dominions. In Canada, the most famous *McGill* in Montreal was founded in 1821. Others are *Laval University*, Quebec (1852); *Montreal University* (1876); the *University of Toronto* (1827) and *Queens University* at Kingston, Ont. (1841).

The early universities in India were patterned after London University rather than on the Oxford-Cambridge style, and were purely examining institutions. Calcutta and Madras universities were founded in 1857 as examining schools with no teaching functions. New universities were later established and by the Act of 1904, teaching functions were permitted in most Indian higher educational institutions.

In Australia, the state plays an important role in the development of universities. The *University of Melbourne* (1853) is the largest in point of numbers. Among the others are: *Adelaide* (1874); the *University of West Australia* (1913); the *University of Queensland* (1909) and the *University of Tasmania* (1890).

There are also numerous and well-endowed universities in New Zealand, South Africa, and other parts of the empire.

The university system in the Soviet Union was being spurred by the state planners. As of 1755, Russia had only three universities—*Moscow*, founded in 1755, *Vilna* (1578) and *Dorpat* (1632). Other institutions developed later were the *University of Kharkov* (1804); *Kazan* (1804); *St. Petersburg* (1819); *St. Wladimir in Kiev* (1832); *Odessa* (1865); *Warsaw* (now Polish) (1886) and *Tomsk* (in Siberia) (1888).

The building of universities after the Revolution of 1917 was spurred by the Soviet government. In 1933, official government sources said that there were 721 institutions of higher learning; these included universities, institutes and academies. Because of the need for developing the vast, unexploited industrial potential of the country, technical studies were stressed in the Soviet universities.

In China, the growth of universities was hampered by the chaotic state of the government in the 1900's, the recurring civil wars and the conflict with Japan. Prior to 1930, there were about 20 universities in the country as well as a number of other higher institutions of learning.

The United States

The university in the United States marches hand in hand with the progress of the nation. Although life for the early settlers in a primitive, unexplored and unexploited land was full of difficulties, they brought with them a heritage of European culture that they planted in New England soil. The first university in the country was started as *Harvard College* in 1636, with an endowment totaling £800. Three hundred and ten years later, Harvard was to become probably the most famous of the American universities with an endowment of more than \$156,000,000,

a faculty of 1,740 members and a student enrollment of more than 3,700.

The *College of William and Mary* (1793) was the second institution of higher learning established in the colonies. Others established during the colonial period (current names only) are: *Yale University* (1701); *Princeton* (1746); *Washington and Lee* (1749); *University of Pennsylvania* (1751); *Columbia* (1754); *Brown* (1774); *Rutgers College* (1766) and *Dartmouth College* (1770).

After the Revolution of 1776, the state tax-supported university was established. The *University of Virginia* (1825) was the most notable example of this type of institution. By 1894, all of the 48 states in the union, with the exception of Massachusetts, Rhode Island, Connecticut, Pennsylvania and New York, had state tax-supported institutions.

Meanwhile colleges for women grew up in the second quarter of the 19th century. Among these are: *Mt. Holyoke Seminary* (1837); *Elmira* (1853); *Vassar* (1865); *Wells* (1868); *Wellesley* (1871); *Smit* (1871); *Hunter* (1871) and *Bryn Mawr* (1881).

In the latter part of the 19th century universities established by virtue of private endowments grew up. Among these are: *Cornell* (1865), which is also a land grant institution; *Johns Hopkins* (1874); *Leland Stanford, Jr. University* (1885) and the *University of Chicago* (1890).

Although an outgrowth of the British universities, the American universities developed into institutions with no counterpart in Europe. The college course of study is four years and is crowned by a bachelor's degree in whatever particular field the student elects to specialize. The traditional bachelor's degree is the bachelor of arts. The next highest degree is the master's degree and crowning honor of them all is the doctorate. American universities frequently confer honorary degrees upon visiting dignitaries.

ZOOLOGICAL GARDENS

Source: Encyclopaedia Britannica.

Far from being a new idea, the custom of keeping savage beasts in captivity is almost as ancient as recorded history. In the early part of 1200 B. C., the Chinese king Wen had a special zoo where he housed animals captured from all parts of ancient China. In the Egypt of the Pharaohs, menageries were kept as adjuncts to the temples and the Empress Hatasu even sent out expeditions to "bring back alive" dogs, monkeys, leopards and giraffes for her own private zoo. Some of

the reigning monarchs of biblical days kept animals. Monkeys and peacocks were King Solomon's pets; lions were kept in captivity by Nebuchadnezzar.

In ancient Greece, many of the prominent citizens collected birds and mammals; the Romans went in for mass capture of scores of lions, leopards and tigers for use in their gladiatorial battles. Octavius Augustus was the Ringling of his day; this monarch, whose hobby was natural history, maintained in 29 B. C.,

st menagerie of tigers, lions and African animals.

Zoos fell into disrepute after the decline of the savage Roman games; it was not until the mediaeval days that zoological gardens were restored, sometimes as private menageries maintained by wealthy nobles, sometimes as civic institutions. The royal menagerie was established by Henry I (1100-85) of England at Woodstock, laying the foundation for the famous *Regent's Park Zoological Garden* in London.

Other rulers also had their zoos. Pope Sixtus V had his own private menagerie in the Vatican and Louis XIV spent substantial sums for the upkeep of his menagerie at Versailles.

One of the earliest zoos, the *Jardin des Plantes* in Paris, was established in 1793. In the following century zoological gardens were established in many of the major cities of the world.

At *Gizeh, Cairo*, the zoological garden is enclosed in a beautiful park, maintained by the government. Its large collection of animals is chiefly African in origin. Elsewhere in Africa, at Khartoum, in the Sudan, at Pretoria and at Johannesburg, fine specimens are found in municipal and state-supported zoological gardens.

North America has more than 30 zoos scattered in the United States, Canada and Mexico. The Quebec Zoological Society's collection is made up of Canadian species; Toronto has in addition many exotic species.

The first zoological garden in the United States was established in Philadelphia in 1827. Since that time nearly every large city in the country has acquired a zoo. Among the large zoos in the country are the celebrated Bronx Zoo and the Central Park in New York—and those in St. Louis, Detroit, Kansas City, Chicago—one in Lincoln Park, another magnificent display at Brookfield—and San Diego. The United States National Zoological Park in Washington, in a beautiful setting of hills, woods and stream, was established in 1890 by an act of Congress. Some of the U. S. zoos exhibit their collections in open-air, barless pits; the Brookfield zoo in Chicago follows this pattern.

Extensive collections in South America are found in Buenos Aires, at Concepción and Santiago in Chile and a zoological-botanical garden at Belém, Pará, Brazil, noteworthy for its specimens of Amazonian birds and animals.

In Asia important collections were established by the governments and by native princes. Largest in India is the zoo at Alipore, Calcutta; other excellent zoos are located at Bombay, Karachi and on private estates. Singapore, Batavia, and Surabaya

have their own important collections. Others are found at Fort de Kock on Sumatra's west coast; and at Johore Bahru on the property of the crown prince. Japan abounds in large and small zoos and privately owned aviaries, located in Tokyo, Nagoya, Kyoto, Osaka and Kobe.

Sydney, Melbourne, Adelaide and Perth have large zoological gardens; smaller zoos in Australia are found at Brisbane and Wellington. The Auckland, New Zealand, collection has a representative group of native fauna.

In Europe, zoological gardens have long been popular public institutions. One of the oldest in France is the *Paris Jardin des Plantes* established in connection with the museum of natural history. It has had constant improvements and a vivarium for smaller creatures was added in recent years. The *Jardin d'Acclimatation*, in the Bois de Boulogne, was established in 1858 and a model zoo at Vincennes was added in 1937 for the Paris Exposition.

The terraced zoo at Zurich and one in Basel are the only two located in Switzerland.

Germany, on the other hand, has about 20 zoological gardens, many of which were developed in the peacetime years between World Wars I and II. Large zoos are located in Berlin and Frankfurt on the Main and at Munich, where the animals are grouped according to the continent of their origin. Others are at Dresden, Leipzig and Cologne. At Stellingen, the *Hagenbeck Garden* became an outstanding show place and distributing center for animals. Smaller collections are found at Düsseldorf, Elberfeld and Hanover. The *Schönbrunn* at Vienna, is one of the oldest zoos in Europe. The *Budapest Zoological Gardens* house a fine collection of European birds. At Antwerp the *Royal Zoological Society* founded a large menagerie in 1843. In England, the outstanding collection, though small, is in the garden of the *London Zoological Society* in Regent's Park. Manchester and Clifton have smaller gardens and the one at Edinburgh is famous for its collection of penguins. The *Dublin Zoo* is noted for its lions, many of which were born there. The *Amsterdam Zoo*, with its East Indies collection and its aquarium, and the *Rotterdam Gardens* are the two best known in the Netherlands. Built on a high elevation the *Skansen Zoo* in Stockholm, exhibits north European specimens. The most important gardens in the U. S. S. R. are found in Moscow where north European as well as exotic species are collected. Some are confined to small enclosures and the herds are segregated in large paddocks. The zoo at Rome has part of its collection confined in barless pits. At Lisbon there is a small zoological garden and in Madrid only part of the original royal menagerie exists.

FAMOUS STRUCTURES

Source: Encyclopaedia Britannica.

The Pyramids of Egypt. Ranked among the oldest monuments in the world, these triangular-shaped crypts, constructed of huge stone blocks, were burial places for the pharaohs. They were built in the epoch of the Ancient Empire (5000 to 3000 B. C.) near Gizeh, Egypt. The three most famous pyramids are Khufu (also known as Cheops) which is more than 480 feet in height and 760 feet at the base, with a 50 degree slope; the other two are Khafra (Cephren) and Menkaura (Mycerinus). Khafra is 471 feet high and Menkaura, the smallest, has an altitude of 215 feet. In construction of the largest pyramid, King Khufu employed 7,000,000 men at forced labor for 30 years.

The Great Sphinx of Egypt. Another wonder of ancient Egyptian architecture is the great Sphinx which has a length of 189 ft. The Sphinx, used as a temple, was built in the 4th dynasty.

Other Egyptian buildings of note include the *Temples of Karnak and Edjou* and the *Tomb of Beni-Hassan*.

The Parthenon of Greece. Built on the Acropolis in Athens, the Parthenon was the chief temple to the goddess Athena. It was believed to have been completed by 438 B. C. The present temple remained intact until the 5th century A. D. Today the Parthenon consists of ruins, whose majestic proportions nevertheless are discernible. It is still regarded as a miracle of architectural perfection, and one of the truly great and beautiful buildings of the world.

Other great structures of ancient Greece were the *Temples at Paestum* (about 540 B. C.); the *Temple of Poseidon* (about 460 B. C.); the *Temple of Apollo at Corinth* (540 B. C.); the *Temple of Zeus at Olympia* (about 465-457 B. C.); *Temple of Apollo at Bassae* (about 450-420 B. C.); the famous *Erechtheum* atop the Acropolis (about 421-405 B. C.); the *Temple of Athena Niké at Athens* (about 426 B. C.); the *Olympieum at Athens* (174 B. C.-131 A. D.); the *Athenian Treasury at Delphi* (about 515 B. C.); the *Propylaea of the Acropolis at Athens* (437-432 B. C.); the great *Altar of Zeus at Pergamum* (197-159 B. C.); the *Theatre of Dionysius at Athens* (350-325 B. C.); the "House of Cleopatra" at Delos (138 B. C.) and the *Theatre at Epidaurus* (325 B. C.).

The Colosseum of Rome. Largest and most famous of the Roman amphitheaters was the Colosseum of Rome which was opened for use in 80 A. D. Elliptical in shape, it consisted of three stories and an upper gallery, all built of stone. Its seats rise in tiers, one above the other; the tiers in turn are buttressed by concrete vaults

and stone piers. It could seat between 40,000 and 50,000 spectators. The Colosseum was principally used as an arena for gladiatorial combat.

The Pantheon at Rome. Begun by Agrippa in 27 B. C. as a temple, it was rebuilt by Hadrian (120-124 A. D.). Literally the Pantheon was intended as a temple of "all the gods." It is remarkable for its perfect preservation today and it has served continuously for almost 20 centuries as a place of worship. Its construction is brick and a hole cut in the dome provides the light.

Other famous Roman buildings include the *Arch of Constantine* (315 A. D.); the *Arch of Titus* (82 A. D.); the *Temple of Vesta* in the Forum; *Hadrian's Villa at Tivoli* and the *House of the Vestal Virgins*.

St. Mark's Cathedral in Venice (1063-1067), one of the great examples of Byzantine architecture, was begun in the 9th century. Partly destroyed by fire in 976, it was later rebuilt as a Byzantine edifice. St. Mark's square has five large arches over the central arch are the celebrated bronze horses. Covered entirely with richly multicolored marble, the cathedral's exterior and interior is rich with mosaic work in porphyry and gold. Because of both the magnificent pigmentation of its marble and mosaics, the church is more famous for its color than for its architecture.

Other famous Byzantine examples of architecture are *St. Sophia* in Constantinople (532-537 A. D.); *San Vitale in Ravenna* (542); *St. Paul's Outside the Walls* in Rome (5th century); the *Kremlin church in Moscow* (begun in 1397); *St. Lorenzo Outside the Walls, Rome*, begun in 588.

The Cathedral Group at Pisa (1067-1173), one of the most celebrated groups of structures built in Romanesque style, consists of the cathedral, the cathedral's baptistery, Campo Santo, and the Leaning Tower. This trio of edifices form a group by themselves in the northwest corner of town. The cathedral and baptistery are built in black and white marble. The campanile (the Leaning Tower) is of white marble, and its height is 179 ft. It leans more than 16 feet out of the perpendicular. There is little reason to believe that the architects intended to have the tower lean.

Other examples of Romanesque architecture include the *Vezelay Abbey* in France (1130); the *Church of Notre Dame-du-Port* at Clermont-Ferrand in France; the *Church of San Zeno* (begun in 1138) at Verona; the *Durham Cathedral* in England and the *Church of the Apostles* at Cologne, Germany (1220).

The Alhambra (1248-1354). Located in Granada, Spain, the Alhambra is unique

ally esteemed as one of the great masterpieces of Mohammedan architecture. Designed as a palace and fortress for the Moorish monarchs of Granada, it is surrounded by a heavily fortified wall more than a mile in perimeter. The location of the Alhambra in the Sierra Nevada Mountains provides a magnificent setting for this jewel of Moorish Spain. The ornamentation of the palace, built in red brick, provides a great part of its glory. Minute and beautiful mosaic patterns are interwoven in a richly-hued framework of crimson, blue, ebony and gold. The most outstanding parts of the Alhambra are the Court of the Lions, the Gate of Justice, the Court of Alberca, the Tower of Carries, the Hall of Ambassadors, the Hall of Justice and the Court of Myrtles.

The Taj Mahal (1632-1650), at Agra, India, built by Shah Jehan as a tomb for his wife, is considered by some as the most perfect example of the Mongol style and by others as the most beautiful building in the world. Four slim white minarets surround the square building which is topped by a white dome; the entire structure is made of marble. Arabesques and passages from the Koran in inlays of precious stones, such as agates, bloodstones, jasper, cover the magnificent exterior. Built of pure white marble, the Taj Mahal stands on a vast white terrace.

Other famed Mohammedan edifices are the *Mosque of Omar*, Jerusalem (691 A.D.); the *Citadel* (1166), and the *Tombs of the Mamelukes*, completed in the 15th century, in Cairo; the *Tomb of Humayun* in Delhi; the *Blue Mosque* at Tabriz and the *Tamerlane Mausoleum* at Samarkand.

Notre Dame de Paris (begun in 1163), one of the great examples of Gothic architecture, is a twin-towered church with a people over the crossing and immense flying buttresses supporting the masonry at the rear of the church. It is noted for the grandeur of its gray-stone vaulted interior, the sweep of its pointed arches and the beauty of its stained glass windows.

Other famed Gothic structures are *Westminster Abbey*, London (begun in 1066); *Chartres Cathedral* (12th century); *Sainte Chapelle* (1246-48) Paris; *Laon Cathedral*, France (1160-1205); *Rheims Cathedral* (1210-50); *Rouen Cathedral* (13th-16th centuries); *Amiens Cathedral* (1218-1269); *Le Mans Cathedral*; *Salisbury Cathedral* (1220-1260); *York Minster* or the *Cathedral of St. Peter* begun in the 7th century; *Cologne Cathedral* (13th-19th centuries) was badly damaged in World War II; and *Giotto's Tower*, Florence, Italy (begun in 1334).

The *Duomo Church* in Florence, was founded in 1298, completed by Brunelleschi and consecrated in 1436. The Duomo is virtually all dome. As designed by Bru-

nelleschi, the oval-shaped dome dominates the entire structure. Octagonal in form, the dome has eight larger ribs running from the lantern at the top to the circular balustrade at the base. Light filtering through the painted windows throws a mellow glow on the church's noble interior.

Other examples of Renaissance architecture are the *Palazzo Vecchio*, the *Palazzo Pitti* and the *Palazzo Bargello* in Florence; *St. Peter's* in Rome (begun in 1506 and consecrated in 1626); the *Palace of the Doges* (1550) in Venice; the *Farnese Palace* in Rome, completed by Michelangelo; *Palazzo Grimani* (completed 1550) in Venice; the *Escorial* (1563-93) near Madrid; the *Town Hall* of Seville (1527-32); the *Louvre*, Paris; the *Chateau at Blois*, France; *St. Paul's Cathedral*, London (1675-1710); the *École Militaire*, Paris (1752); the *Pazzi Chapel*, Florence, designed by Brunelleschi (1429); the *Palaces of Versailles* and of *Fontainebleau* and the *Chateau Chambord* in France.

Few innovations in architecture were introduced in the 18th and 19th centuries. Italian designers, perpetuating the style of preceding centuries, suffered in addition from the restraining influence of other countries. However, outstanding buildings during this era are the *La Superga* at Turin, the *Hotel-Dieu* in Lyon, the *St. Genevieve Church* in Paris, the *St. Karl Borromäus Church* in Vienna, the *Belvedere Palace* at Vienna, the *Royal Palace* of Stockholm, the *Opera House* of Paris (1863-75); the *Bank of England*, the *British Museum*, the *University of London* and the houses of parliament, all in London; the *New Museum* and the *Court Theatre* in Berlin; the parliament house in Vienna; the *Pantheon*, the *Church of the Madeleine*, the *Bourse* and the *Palais de Justice* in Paris; and the *Dresden Theater*.

United States Buildings

Rockefeller Center, New York City, completed in 1940, consists of a remarkable group of notable examples of the new skyscraper architecture in America. It is dominated by the 70-story R. C. A. building in the center. There are 14 separate buildings and the five edifices of the western section of the center are known as Radio City. The buildings are constructed of stone and the architecture is severe and simple; long fluted lines running from top to base dominate the architectural theme.

Empire State Building, New York City. The loftiest building in the world, the Empire State has 102 stories, is 1,250 feet high. Its architecture is not exceptional.

Other famous examples of modern buildings in the United States are the *Chrysler Building*, the *Woolworth Building* in New York; the *Merchandise Building*, the 333

Building, Civic Opera House in Chicago; and the Pentagon in Washington.

Oriental Architecture

Notable examples of Indian architecture are the temples at Benares, and at Kall Katraha and the Pagoda in Tanjore.

Angkor Vat, outside the city of Angkor Thom, Cambodia, is one of the most beautiful examples of Cambodian architecture. The sanctuary was built during the 12th century. Its temple court, protected by a broad moat, has two square cloisters and a central tower connected by galleries which are decorated with celebrated reliefs depicting heroic epics, scenes from the contemporary royal court and the priesthood and army.

Great Wall of China (228 B. C.?). While designed specifically as a defense arrangement against nomadic tribes, the Great

Wall has scores of large watch towers which could be called buildings. It was erected by Emperor Ch'in Shih Huang T and is 1,400 miles long. Built mainly of earth and stone, it varies in height between 18 and 30 feet.

Typical expressions of Chinese architecture are the pagodas or temple towers. Among some of the better known pagodas are the *Great Pagoda of the Wild Geese* at Sian (founded in 1652); the 11th century *Nan t'a* at Fang Shan; the *Pagoda of Sung Yeh Ssu* (523 A. D.) at Sung Shan Honan.

Other well-known buildings are the *Drum Tower* in Peking (1273), the *Three Great Halls* in the Purple Forbidden City Peking (1627). *Buddha's Perfumed Tower* a 19th century edifice, at Peking, the *Porcelain Pagoda* in Peking and the *Summer Palace* at Peking.

Great World Dams

Storage cap. in billions of gallons	Name	Location	Height in feet	Cost, in thousands of dollars, (including power dev't)
9,938	BOULDER	Colorado River, Ariz.-Nev.	727	128,000
6,354	FORT PECK	Missouri River, Mont.	242	86,000
3,142	GRAND COULEE	Columbia River, Wash.	550	186,000
1,437	GATUN	Panama Canal	115	9,823
1,322	ASWAN	Egypt	147	29,000
1,107	NORRIS	Clinch River, Tenn.	265	36,604
860	ELEPHANT BUTTE	Rio Grande River, N. M.	306	4,149
749	SALUDA	Saluda River, N. C.	208	6,000
749	OSAGE	Missouri	148	30,000
700	METTUR	Madras Presidency, India	239	
651	HUME	New S. Wales	200	
533	ROOSEVELT	Salt River, Ariz.	284	3,890
448	MARTIN	Tallapoosa River, Ala.	180	16,000
410	HARTEBEESTPOORT	South Africa	193	8,000
391	COOLIDGE	Gila River, Ariz.	249	4,500
364	OWYHEE	Owyhee River, Ore.	417	6,000
359	DON MARTIN	Tamaulipas, Mexico	111	8,000
348	PATHFINDER	N. Platte River, Wyo.	218	1,755
293	KENSICO	Bronx Watershed, N. Y.	307	6,735
291	DNIEPER RIVER	Soviet Union	200	110,000
264	ESLA	Near Zamora, Spain	328	12,000
162	WILSON	Tenn. River, Ala.	137	47,000
148	SHOSHONE	Shoshone River, Wyo.	328	1,439
140	SENNAR	Blue Nile River, Sudan	128	43,000
120	ASHOKAN	Catskill Watershed, N. Y.	252	32,000
119	JANDULA	Near Andujar, Spain	295	5,000
117	O'SHAUGHNESSY	Tuolumne River, Cal.	344	10,000
107	COWINGO	Susquehanna River, Md.	105	52,000
98	HARRODSBURG	Dix River, Ky.	270	7,000
94	ARROWROCK	Boise River, Idaho	354	4,328
83	BARBERINE	Alps, Switzerland	271	20,000
78	SAN GABRIEL	San Gabriel River, Cal.	355	25,000
72	PARDEE	Mokelumna River, Cal.	358	6,300
58	NEW CROTON	Croton Watershed, N. Y.	297	7,631
45	KRISHNARAJA	British India	124	13,000
35	OTTMACHAU	Germany	57	14,000
23	JERRY O'CONNELL	Bananeiras, Bahia, Brazil	110	5,000
20	SCHOHARIE	Catskill Watershed, N. Y.	182	12,300

Notable Modern Bridges

Length of span in feet	Name	Location	Type	Year completed
1,200	GOLDEN GATE	San Francisco	S	1937
1,500	GEORGE WASHINGTON	New York City	S	1932
2,310	TRANSBAY	San Francisco	S	1936
2,300	BRONX-WHITESTONE	New York City	S	1939
1,850	AMBASSADOR	Detroit, Mich.	S	1929
1,800	QUEBEC	Near Quebec, Can.	C	1917
1,750	DELAWARE RIVER	Philadelphia, Pa.	S	1926
1,710	FORTH	Firth of Forth, Scot.	C	1890
1,652	BAYONNE	Bayonne, N. J.	S	1924
1,650	SYDNEY HARBOR	Sydney, Australia	SA	1931
1,632	BEAR MOUNTAIN	Peekskill, N. Y.	SA	1931
1,600	WILLIAMSBURG	New York City	S	1903
1,595.5	BROOKLYN	New York City	S	1883
1,550	FIRST NARROWS	Vancouver, Can.	S	1939
1,500	MID-HUDSON	Poughkeepsie, N. Y.	S	1929
1,470	MANHATTAN	New York City	S	1909
1,400	TRANSBAY	Oakland, Calif.	C	1936
1,380	TRIBOROUGH	New York City	S	1936
1,246	RODENKIRCHEN	Rodenkirchen, Ger.	S	1940
1,207	ST. JOHNS	Portland, Ore.	S	1931
1,200	LONGVIEW	Longview, Wash.	C	1927
1,200	MT. HOPE	Near Bristol, R. I.	S	1929
1,182	QUEENSBORO	New York City	C	1909
1,114	FLORIANOPOLIS	Brazil	S	1926
1,100	CARQUINEZ STRAIT	Near San Francisco	C	1927
1,097	MONTREAL HARBOR	Montreal, Can.	C	1929
1,080	DEER ISLE	Deer Isle, Me.	S	1939
1,050	BEIT	S. Rhodesia	S	1939
1,050	COOPER RIVER	Charleston, S. C.	C	1929
1,050	OHIO RIVER	Cincinnati, O.	S	1863
1,010	WHEELING	Wheeling, W. Va.	S	1862
977.5	HELL GATE	New York City	SA	1916
950	RAINBOW	Niagara Falls, N. Y.	SA	1941
924	STORY	Queensland, Australia	C	1940
875	NATCHEZ	Natchez, Miss.	C	1940
871	BLUE WATER	Port Huron, Mich.	C	1938
858	BATON ROUGE	Baton Rouge, La.	C	1940
840	GREENVILLE	Greenville, Miss.	C	1940
839	DUISBURG	Duisburg, Ger.	CT	1935
800	HENRY HUDSON	New York City	SA	1936

—Cantilever; S—Suspension; SA—Steel Arch; CT—Cont. Truss

America's Tallest Buildings

City	Building	No. of stories in feet	Height in feet	City	Building	No. of stories in feet	Height in feet
New York	Empire State	102	1,250	New York	Singer	47	612
New York	Chrysler	77	1,046	Chicago	Board of Trade	44	612
New York	60 Wall Tower	66	950	New York	New York Life	40	610
New York	Bk. of Manhattan	90	927	New York	U. S. Court House	37	590
New York	R. C. A.	70	850	Pittsburgh	Gulf	43	584
New York	Woolworth	60	792	New York	Municipal	24	580
Cleveland	Terminal	52	708	Cincinnati	Carew Tower	48	574
New York	Met. Life	50	700	New York	Carlyle	40	570
New York	500 Fifth Ave.	60	697	Chicago	Temple	21	569
New York	City Bank	54	686	New York	Continental Bank	48	562
New York	Chanin	50	680	New York	N. Y. Central	35	560
New York	Lincoln	53	673	Detroit	Penobscot	47	557
New York	Irving Trust	50	646	Chicago	Pittsfield	38	557
New York	Waldorf Astoria	47	625	Chicago	Civic Opera	45	555
New York	10 E. 40th	48	620	Chicago	Medinah	42	555
New York	Sherry Neth'lands	43	620	Columbus	Citadel	46	555
New York	General Electric	50	616	Chicago	Palmolive	37	551

Great Disasters

Earthquakes and Volcanic Eruptions

- 79 A.D. ITALY: eruption of Mt. Vesuvius buried cities of Pompeii and Herculaneum, killing thousands.
- 1626 July 30, ITALY: 70,000 killed and 30 towns destroyed in earthquake centering near Naples.
- 1731 Nov. 30, CHINA: capital of Peking destroyed by earthquake, about 100,000 casualties.
- 1794 Feb. 4, ECUADOR: 40,000 buried alive in earthquake that demolished Quito and Cuzco.
- 1855 Nov. 11, JAPAN: 30,000 killed by earthquake at Jeddo.
- 1883 May 20, NETHERLANDS EAST INDIES: eruption of Krakatao occurred, violent explosions Aug. 26; two-thirds of island destroyed. Tidal waves of 115 feet; estimated 36,000 dead.
- 1902 May 8, WEST INDIES: Martinique Island, Mt. Pelée erupted and wiped out city of St. Pierre and entire population of 28,000.
- 1906 April 18, SAN FRANCISCO: earthquake accompanied by fire that raged over 7,000 square blocks; 1,000 died; property damage about 250 millions.
- 1923 Sept. 1, JAPAN: earthquake destroyed seven-tenths of Tokyo and most of Yokohama. 99,331 dead 103,733 injured and 43,000 missing.
- 1935 May 31, INDIA: earthquake at Quetta killed about 60,000.
- 1939 Dec. 27, NORTHERN TURKEY: several quakes in eastern and northern Anatolia destroyed city of Erzincan about 100,000 casualties.

Floods and Tidal Waves

WORLD

- 3246 or 2104 B. C. ASIA MINOR: The Deluge (Bible), flood continued for forty days, waters remained 150 days.
- 1228 A.D. HOLLAND: 100,000 drowned by sea flood in Friesland section.
- 1642 CHINA: rebels besieging Kaifeng destroyed seawall, causing flood that drowned 300,000 inhabitants.
- 1887 CHINA: millions of lives reputedly lost in Honan province by the overflowing of Hwang-ho River.
- 1896 JAPAN: tidal wave following an earthquake killed 27,000.
- 1937 INDIA: Hooghly River flood, and storm in Bay of Bengal with huge tidal wave killed 300,000.
- 1939 CHINA: floods in north; ten million homeless, starved or drowned.
- 1941 INDIA: Ganges Delta, 5,000 drowned in violent rainstorms in Barisal.

UNITED STATES

- 1856 MISSISSIPPI: cyclone-whipped waves drowned 400 attending a ball at Lake Isle in mouth of Mississippi River.
- 1889 PENNSYLVANIA: 2,142 lost in Johnstown flood.
- 1912 MISSISSIPPI: Mississippi River and tributaries overflowed causing 3 million property damage and 21 deaths.
- 1913 OHIO: floods by Ohio and Indiana rivers took 730 lives and caused 15 million property damage.
- 1927 May, MISSISSIPPI: floods in Mississippi Valley inundated 20,000 square miles and left 700,000 homeless.
- 1937 MISSISSIPPI: floods in the Allegheny, Mississippi and Ohio valleys caused 900 deaths.
- 1941 MISSOURI: half a million acres flooded in Nebraska-Missouri area caused 13 million damages.

Tornadoes, Typhoons and Hurricanes

WORLD

- 1864 Oct. 5, INDIA: most of Calcutta denuded by cyclone killed 70,000.
- 1876 Oct. 31, INDIA: cyclone and tidal wave swept 3,000 square miles with Bengal worst hit; 215,000 killed.
- 1881 Oct. 8, CHINA: typhoon at Halfong killed estimated 300,000.
- 1882 June 6, INDIA: cyclone and tidal wave killed 100,000 in Bombay.
- 1903 Jan. 13, PACIFIC ISLANDS: hurricane at Hao and Marakou killed between 800 and 1,000.
- 1906 CHINA: typhoon at Hong Kong killed about 10,000.
- 1930 Sept. 3, SANTO DOMINGO: hurricane killed about 2,000 and injured 6,000.
- 1934 Sept. 21, JAPAN: hurricane killed 232 at Honshu.
- 1935 Oct. 25, HAITI: hurricane and flood ravaged Jérémie and Jacmel districts; 2,000 killed.
- 1942 Oct. 16, INDIA: cyclone devastated Bengal; about 40,000 lives lost.

UNITED STATES

- 75 Sept. 15 to 18, TEXAS: hurricane at Galveston swept away houses, villages and caused great loss of life.
- 84 Feb. 18, SOUTHERN STATES: tornadoes took about 700 lives.
- 86 Oct. 12, TEXAS: violent gales caused flood resulting in 250 dead.
- 93 Aug. 27, SEA ISLAND: off North Carolina and Georgia; about 900 killed.
- 00 Sept. 8, TEXAS: Galveston struck by hurricane and tidal wave; 5,000 dead and 17 million damage.
- 25 Mar. 18, MIDWEST: about 800 killed and 13,000 injured in tornado which hit Ill., Ind., Tenn., Ky., and Mo.; 15,000 homeless, 35 towns destroyed.
- 1926 Sept. 18, FLORIDA: hurricane which hit Florida's East Coast took 373 lives, left 40,000 homeless and caused property damage of \$165,000,000.
- 1928 Sept. 12, FLORIDA: hurricane from Windward Island killed 4,000.
- 1936 April 2, MISSISSIPPI and GEORGIA: Tupelo, Miss., and Gainesville, Ga., centers of tornadoes which swept southern states; 402 killed; 1,853 injured.
- 1945 Sept. 15, SOUTHERN U. S. AND BAHAMAS: terrific windstorm reaching 143-mile gale destroyed three hangars, 25 patrol blimps, 366 aircraft at Richmond, Fla., damage about 50 million.

Fires

WORLD

- A. D. ITALY: Rome burned for eight days, most of city destroyed.
- 75 Sept. 2, ENGLAND: "Great Fire of London" destroyed 13,200 houses, St. Paul's Church, 86 parish churches, etc. Damages about 10 million pounds.
- 90 SWEDEN: over 1,000 houses burned down at Karlskrona.
- 12 RUSSIA: fire started by Russians in Moscow to prevent Napoleon from occupying city destroyed 30,800 houses.
- 71 FRANCE: city of Paris fire started during fighting in "Paris Commune" caused about 170 million damage.
- 81 Dec. 8, AUSTRIA: about 850 died in Ring Theater fire in Vienna.
- 17 Dec. 6, CANADA: between 1,500 and 1,800 killed in explosion and fire when *Mont Blanc* (ammunition ship) collided with the *Imo*; 25,000 homeless, 20 million damage.
- 22 ASIA MINOR: Smyrna almost destroyed on eve Turkish occupation, great loss of life, 100,000 homeless, about 200 million damage.
- 24 CHINA: Canton burned during the civil war; 20 million damage.
- 44 April 14, INDIA: ship fire that spread to ammunition depot killed 128 in Bombay.

UNITED STATES

- 1835 NEW YORK CITY: 530 buildings burned down by fire over 52 acres, causing 15 million damage.
- 1851 ST. LOUIS: 2,500 buildings leveled by fire which destroyed three-fourths of city, 11 million damage.
- 1871 Oct. 8, CHICAGO: the "Chicago Fire" which started in barn, swept 2,124 acres, burned 17,450 buildings, killed 250 persons and made 98,500 homeless; 196 million damage.
- 1872 Nov. 9, BOSTON: burned 65 acres, destroyed 776 buildings; 75 million damage.
- 1900 June 30, HOBOKEN, N. J.: destroyed docks and piers, damaged ocean liners and killed about 200.
- 1934 CHICAGO: Union Stock Yards destroyed, thousands homeless, 10 million damage.
- 1937 Mar. 18, NEW LONDON, TEXAS: natural gas explosion destroyed schoolhouse; 413 children and 14 teachers killed.
- 1942 Nov. 28, BOSTON: Cocoonut Grove night club fire burned 493 to death.
- 1944 July 17, PORT CHICAGO, CALIF.: 321 killed in explosion of two ammunition ships.
- 1946 June 5, CHICAGO: La Salle Hotel fire killed at least 60.

The Great Fire of England

On September 2, 1666, in a wooden house on Pudding Lane in the City of London, from small hearthstone spark a conflagration began that swept over London and burned for three days and nights. It destroyed all the buildings of 436 acres, 400 streets, 13,200 houses, 86 parish churches, St. Paul's Church, 6 chapels, the Guild Hall, the Royal Exchange, many hospitals, libraries and four large prisons. The total property loss was estimated at £10,730,500, or approximately fifty million dollars. Only six lives were lost.

Shipwrecks

WORLD

- 1833 May 11, *LADY OF THE LAKE*: bound from England to Quebec struck iceberg; 215 perished.
- 1853 Sept. 29, *ANNIE JANE*: emigrant vessel off coast of Scotland, 348 passengers and crewmen died.
- 1912 Mar. 5, *PRINCIPE DE ASTURIAS*: Spanish steamer struck rock of Sebastien Pt.; 500 drowned.
- 1914 May 29, *EMPRESS OF IRELAND*: sank after collision with Danish collier in St. Lawrence River; 1,024 perished.
- 1916 Feb. 26, *PROVENCE*: French auxiliary cruiser; only 870 survived out of 4,000 passengers and crew.
- 1928 Nov. 12, *VESTRIS*: British steamer sunk in gale off Virginia coast; 110 perished.
- 1931 June 14, *FRENCH EXCURSION STEAMER*: overturned in gale off St. Nazaire; approximately 450 died.
- 1939 June 1, *SUBMARINE Thetis*: sank in Liverpool Bay, Eng.; 99 perished, four escaped.
- 1942 Oct. 2, *QUEEN MARY*: rammed and sunk a British cruiser; 338 aboard the cruiser died.

UNITED STATES

- 1865 April 27, *STEAMBOAT Sultana*: boiler explosion on Mississippi near Memphis; 1,450 killed.
- 1898 Feb. 15, U. S. *BATTLESHIP Maine*: 2 officers and men blown up in Havana Harbor.
- 1904 June 15, *GENERAL SLOCUM*: excursion steamer burned in New York Harbor; 1,021 women and children perished.
- 1912 Apr. 15, *TITANIC*: sunk after collision with iceberg; 1,513 died.
- 1915 May 7, *LUSITANIA*: torpedoed by German boat in Atlantic Ocean; 1,198 died.
- 1915 July 24, *EASTLAND*: Great Lakes excursion steamer overturned in Chicago River; 812 died.
- 1934 Sept. 8, *MORRO CASTLE*: about 100 killed in fire off Asbury Park, N. J.
- 1939 May 23, *SUBMARINE Squalus*: sunk with 59 men off Hampton Beach, N. H.; 33 of the crew were rescued.
- 1943 June 6, *AMMUNITION SHIP*: collided with oil tanker off Norfolk, Va.; 3 died.
- 1945 April 9, U. S. *SHIP*: loaded with aerobombs exploded at Bari, Italy; 30 killed.

Airplane Accidents

- 1921 Aug. 24, ENGLAND: ZR-2, British dirigible broke in two on trial trip near Hull; 62 died.
- 1928 May 25, ARCTIC AREA: dirigible *Italia*, piloted by Gen. Nobile of Italy, crashed near Fayen Island north of Spitsbergen, killing eight.
- 1930 Oct. 5, FRANCE: British dirigible, R-101, crashed over Beauvais in flames, 47 died, including Lord Thomson.
- 1935 May 18, SOVIET UNION: stunt flier crashed into giant land plane, the *Maxim Gorky*; 49 killed.
- 1938 July 24, COLOMBIA: military plane crashed into grandstand at air review at Bogota, killing 53.
- 1939 ECUADOR: military plane crashed in Guayaquil street, killing 25.
- 1942 Aug. 25, SCOTLAND: Duke of Kent and all aboard killed in crash of flying boat.
- 1943 Jan. 15, DUTCH GUIANA: all 35 aboard, including Eric Knight, novelist, killed in jungle crash of transport plane near Paramaribo.
- 1943 May 3, ICELAND: Lt. Gen. Frank M. Andrews and Bishop Adna W. Leonard among 14 killed in plane crash.
- 1943 July 4, GIBRALTAR: Premier Wladyslaw Sikorski of Poland and 15 others killed in plane crash.
- 1925 Sept. 3, CALDWELL, OHIO: ZR-1 U. S. S. *Shenandoah* broke in three parts killing 14.
- 1933 April 4, NEW JERSEY COAST: U. S. dirigible Akron crashed into sea, 3 died.
- 1936 Jan. 1, GOODWIN, ARK.: 17 died in crash of airliner.
- 1937 May 6, LAKEHURST, N. J.: zeppelin *Hindenburg* destroyed by fire while tower mooring. 56 aboard died.
- 1940 Aug. 31, LOVETTSTOWN, VA.: commercial liner crashed, all 25 aboard died.
- 1941 Feb. 27, ATLANTA, GA.: seven killed in crash of airliner; Capt. Ed Rickenbacker survived.
- 1943 May 20, CHICAGO: army bomber crashed into gas storage tanks, set fire to 18 million cu. ft. and killed 12 occupants of plane.
- 1943 July 28, BOWLING GREEN, Ky.: airliner crash killed 20 aboard.
- 1944 July 27, SCOTTISH COAST: U. S. hospital transport plane crashed; 3 died.
- 1946 Oct. 3, NEWFOUNDLAND: U. S. transatlantic airliner enroute to Bermuda crashed near Stephenville; all aboard killed.

TRAVEL GUIDE



Prepared by

THE AMERICAN EXPRESS
WORLD TRAVEL SERVICE



With the world disrupted for many years, information for the following guide was obtained under pressing circumstances. Once-famous hotels have been destroyed, monetary systems have undergone changes, and some air and steamship lines are still in a state of reconversion. American Express has strived, nevertheless, to present as accurate a guide as possible under such exigencies.

FOREWORD

There are three types of travel arrangements:

(a) Securing reservations, hotel accommodations, and transportation tickets alone, then making independent sight-seeing trips and other arrangements. (b) Having a travel organization obtain transportation tickets and hotel reservations, then touring privately in the country of destination. (c) Taking an escorted tour, including all details such as tickets, meals, hotel accommodations, transportation, and sight-seeing. Regardless of arrangement, the prime requisites for foreign travel are a passport and visa.

U.S. passport fee is \$10. Fees for a visa, issued by the country into which travel is intended, vary from \$1.00 to \$5.00. Two photographs are required for a passport and two, generally, for a visa. When exceptions to this exist, notation has been made under "Entry Requirements" of the country concerned. Some visas are merely rubber stamps on the passport, others are separate documents.

A tourist card is a permit for travel issued by Mexico, Cuba, Guatemala, and certain other countries. It is sometimes all that is required for entry and thus takes the place of a visa and sometimes of both visa and passport.

Where passports and visa are not required, it is advisable to carry a photostatic copy of birth certificate as proof of American citizenship plus personal identification.

Some countries, particularly in South America, require certificates of health, good conduct, and vaccination before granting a visa.

In the travel guide, airlines serving each country are listed. Points reached directly from the United States are given in parentheses.

Baggage allowance on planes is sixty-six pounds to Europe and the Orient, fifty-five pounds to Mexico, Central and South America with 1 percent of the one-way fare charged for each 2.2 lbs. additional.

Ports of call for steamships are listed followed by the lines that make these points and, in parentheses, the flag under which ships of this line generally sail.

On steamships a reasonable amount of hand luggage is allowed. Steamer trunks are usually charged for at a rate of \$2.00 for the first and \$3.00 for each additional, with five trunks as the limit carried. Passengers may ship automobiles under 3500 lb. to Europe for approximately \$350. For heavier cars the charge is around \$400. A small amount of marine insurance is often required, usually amounting to less than \$5.

Travelers may take cameras, small amounts of cigarettes (approximately 100), whisky (one bottle) into foreign countries duty free. Some countries require a camera permit, issued without charge on arrival.

Upon returning to the United States, tourists may bring in \$100 worth of merchandise duty free if not for resale or commercial use. Liquor, however, is limited to one gallon and cigars to 300.

Since hotel accommodations are often difficult to obtain abroad, travelers should obtain confirmed reservations through American Express Company offices and agencies. Tourists should further protect personal funds by carrying American Express Travelers Cheques.

Under the various countries, typical celebrations as well as events of international interest have been listed. The unit of currency and coins used are described.

Acclimatization is an important factor in traveling and sudden weather changes necessitate limitation of activities at first, particularly in extremely warm climates. Hats are absolutely necessary in Torrid zones to avoid sunstroke.

Particular attention should be paid to daily extremes in heat and cold in order to plan suitable clothing. Climatic conditions and the best traveling time are given for each country.

In all South and Central American countries, the Orient, and equatorial Africa, only cooked food should be eaten.

All travelers in foreign countries may use American Express offices as meeting places, mail addresses, information centers, and for obtaining interpreters.

TRAVEL GUIDE

Airline Symbols: ABA—Swedish Airways AOA—American Overseas Airways BOAC—British Overseas Airways DDL—Danish Airways KLM—Royal Dutch Airways PAA—Pan-American World Airways PANAGRA—Pan American-Grace Airways SABENA—Belgian Air Lines SCANDINAIR—ABA, DDL, Norwegian Air Lines combined under this name on transatlantic flights only TACA—Transportes Aeros Centro Americanos TWA—Trans World Airways.

Weather (Fahrenheit):

Hot—Over 80° Cool—40° to 60°
Warm—70° to 80° Cold—20° to 40°
Cold—60° to 70° Extremely cold—Below 20°

Average Annual Rainfall:

Very light—Under 20" Moderate—40" to 60"
Light—20" to 40" Heavy—60" to 80"
Extremely heavy—Above 80"

NORTH AMERICA

Alaska

With Arctic waters on the north and east, and north Pacific waters along the west southeastward, there are great variations in temperature and precipitation. Climate in the Aleutians is oceanic, moderate, with fairly uniform temperatures, considerable rain and almost continual fogs. Summers are cooler than along the coast to the east and south, winters are milder with less snow and the temperature never drops to zero; rain in summer and snow in winter are heavy. In the interior, rain and snow are comparatively light, except in the high ranges, but temperatures are low, often dropping to 50 or 60 below zero. Summers are short, hot. While Nome receives only 16 inches of yearly rain, Ketchikan, along the coastal strip next to British Columbia, has 162 inches of annual rain. In July and August, Nome's warmest months, the average daily high is about 60.

Ketchikan, during the same months, averages about 60 as a daily high. The daily high at Juneau from June to August averages about 63 and during its coldest month, January, the daily high averages 60. Best traveling time: June, July, August.

Monetary unit: U. S. currency.

Principal cities: Anchorage, Fairbanks, Juneau, Ketchikan, Nome, Sitka.

Entry requirements: None for U. S. citizens.

Airlines: PAA (Fairbanks, Juneau, Ketchikan, Nome), Northwest Airlines (Anchorage).

Steamships: To Juneau, Ketchikan: Alaska Steamship Co. (Amer), Canadian Pacific Alaska Service (Brit), Northland Transportation Co. (Amer). To Sitka: Northland Transportation Co.

Hotels: Anchorage: Anchorage, Westward. Fairbanks: Nordale. Juneau: Barclay, Gastineau. Ketchikan: Ingersoll, Edman. Nome: Patterson, Wallace.

American national holidays are observed.

Canada

Broadly speaking, the annual temperature along the Arctic Circle is about 55 and south of the Gulf of Saint Lawrence the annual mean is 40, with summer months averaging about 60, and receiving 40 to 56 inches of yearly rain and light snow. Twenty to forty inches of rain fall yearly in Quebec and northern Ontario, and snows cover the ground from the beginning of December until the end of March. Winters are cold, summers average 60 to 65, but the skies are clear, the air bracing. Montreal averages a daily high of 73 in July, its warmest month. Winter storms sweep north of southern Ontario, bringing rain in the south and causing a variable winter; summers are at a 65 average and have occasional temperatures of 90. Precipitation diminishes westward, most rain falling from May to August. Snowfall is lighter than northern Ontario and Quebec, and winter temperatures are lower. The prairie provinces have short, warm summers and long, cold winters but there is much sunshine during both periods. In southern Alberta, the winters are often warmed by westerly winds, called Chinooks, which can raise the temperature in a few hours from 20 to 40 degrees. In the Cordilleran region the coast climate is insular and winter frost is light, summer heat mild, but rains heavy, averaging 100 inches yearly on the southwest side of Vancouver Island and near Prince Rupert. Beyond the coast range, climate is generally milder, rain is lighter, and snowfall more moderate, toward the south, but northern winters are sharp. The interior plateau is arid. The Selkirk Mountains receive heavy rains and, on the west sides, huge snowfalls, but the eastern slopes receive much less. While Vancouver and Victoria are mild and moist, perpetual snows lie at heights above 8,000 feet. Northwest and northeast of Hudson Bay, the climate is too severe for the growth of trees. Best traveling time: May to September.

Monetary unit: dollar. Coins used: dollar; cent (50, 25, 10, 5, 1). One dollar equals 100 cents. U. S. currency widely used, particularly in metropolitan and border areas.

Principal cities: Calgary, Edmonton, Halifax, Hamilton, Montreal, Ottawa, Quebec, Toronto, Vancouver, Windsor, Winnipeg.

Entry requirements: Proof of U. S. citizenship.

Airlines: American Airlines (Toronto, Windsor), Colonial Airlines (Montreal, Ottawa), Northeast Airlines (Montreal), Northwest Airlines (Winnipeg), Trans-Canada Air Lines (Calgary, Edmonton, Halifax, London, Montreal, Ottawa, Toronto, Vancouver, Windsor, Winnipeg), United Air Lines (Vancouver).

Steamships: To Halifax: Canadian National Steamship Co. (Brit), Furness Line (Brit). To Montreal: Canadian National, Canadian Pacific (Brit). To Quebec: Canadian National. To Vancouver: Canadian Pacific, Klaveness Line (Norweg).

Hotels: Calgary: Carlton, Noble, Palliser, Wales. Edmonton: Alberta, Corona, King Edward, Macdonald. Halifax: Carleton, Lord Nelson, Nova Scotian. Hamilton: Regal, Royal Connaught. Montreal: Ford, Mount Royal, Queen's, Ritz-Carlton, Windsor. Quebec: Chateau Champlain, Chateau Frontenac, Clarendon, Kent House, St. Louis, St. Roch. Toronto: Ford, King Edward, Royal York, St. Regis. Vancouver: Georgia, Vancouver. Winnipeg: Fort Garry, McLaren, Royal Alexandra.

American Express Offices: Montreal: Sun Life Building.

Winter sports carnival at Banff, Alberta, from January to March. Allan Cup amateur national hockey championships and Stanley Cup international hockey play-offs in April. Queen's Birthday celebrated with parades May 24. Apple Blossom Festival at Kentville, Nova Scotia, in late May or early June. Dominion Day, July 1, observed with parades, fireworks, sports events. Street dancing, log-rolling, crowning of Lumber Queen at Duncan, British Columbia, in July. Grand opera under starlight in Montreal in July. Bastille Day band festival July 14 at Montreal. Horse races, Indian ceremonies, fireworks, North American rodeo championship events the second week in July at Calgary, Alberta. Highland games at Antigonish, Nova Scotia, July 17. Indian ceremonies, Royal Mounted Police events, covered wagons, historical pageants, fireworks and rodeo events at Banff the third week in July. Gaelic Mod and highland gathering at St. Ann's Gaelic college, Nova Scotia, in late July. In Quebec, St. Anne de Beaupré Day is honored July 26 with religious processions. Agriculture and Industry Exhibition, rodeo events at Edmonton, Alberta, the third week in July. Harness racing, agricultural exhibits cele-

brate Provincial and Old Home Week on Prince Edward Island in August. International tuna tournament at Wedgeport, Nova Scotia, in August. National Exposition in Toronto during September. Royal Winter Fair, including international horse show, at Toronto in November.

Mexico

Severed mid-way by the Tropic of Cancer, stretched along a vast area and flanked by Pacific and Gulf waters, mountainous and tropical Mexico has great variations in climate. Low elevations are hot and the mean temperatures in the *tierra caliente*, which includes the Yucatán Peninsula, Tabasco, part of Chiapas, the isthmus of Tehuantepec and some of Oaxaca, ranges from 77 to 82. Progreso, on the Yucatán coast, averages 77 as a daily high in its coldest month, January, the temperature climbing to daily high average of 80 during June, July and August, with high humidity. Mazatlán, on the Pacific, rather similar, although slightly warmer during July and August. The *tierra templada*, 5,500 to 6,000 feet, is composed in Nuevo León, San Luis Potosí, most of Coahuila, nearly half of Tamaulipas, part of Vera Cruz, almost all of Guerrero, Jalisco, Sinaloa and Sonora and is more temperate averaging 75 as an annual mean, and is probably the best of the climatic zones. In the higher parts of the plateau, the *tierra fría*, the average annual mean is 63 and although there is often slight frost at night, there are no cold winters nor very hot days. Mexico City, at 7,411 feet, averages a daily high of 66 and a low of 50 during January, the daily high averages only 76 in June with a low average the month of 55. The temperature has a daily range of 20 degrees all year with December and January the coldest months, April and May the warmest. In winter, the temperature at Mexico City sometimes dips to 50 at night. South of the Tropic of Cancer rains are heavy, being about 80 to 100 inches annually in southern Campeche, Tabasco and Vera Cruz. From June to November, hurricanes sometimes strike the Caribbean and Pacific coastlands, occurring most frequently in September. At Mexico City, the dry season begins in October, ends in June, and it is colder there during the rainy season which is the rest of the year. Except for the lowlands, the travel season is year around. For the lowlands, best travel time is November to March.

Monetary unit: peso. Coins used: peso; centavo (50, 20, 10, 5, 2, 1). One peso equals 100 centavos.

Principal cities: Acapulco, Chihuahua, Cuernavaca, Guadalajara, León, Mazatlán, Mérida, Mexico City, Monterrey, Pachuca, Puebla, Saltillo, Tampico, Torreón, Veracruz.

Entry requirements: Tourist card. Tourists proceeding from Mexico to Guatemala are required to surrender tourist cards in Mexico prior to departure. After arrival in Guatemala they must present themselves to Mexican Consulate to obtain a new tourist permit for entry into Mexico upon return journey. To secure second tourist permit in Guatemala, traveler must present proof of U. S. citizenship, three photographs.

Airlines: PAA (Guadalajara, Mazatlán, Mérida, Mexico City, Monterrey, Tampico, Vera Cruz); TACA (Mexico City); American Airlines (Mexico City, Monterrey); Braniff Airways (Mexico City, Monterrey).

Steamships: To Progreso: Yucatan Line (Norweg). To Tampico: Cuba Mail Line (Amer). Standard Fruit (Amer). To Vera Cruz: Cuba Mail Line, Fred Olsen Line (Norweg), Standard Fruit, Smith and Johnson (Norweg), Wilhelmsen Line (Norweg).

Hotels: Acapulco: América, Del Monte, El Mirador, Flamingos, Las Hamacas, Mar Azul, Papagayo. Chihuahua: Apolo, Palacio Hilton, Victoria. Cuernavaca: Chula Vista, De La Selva, Marik. Guadalajara: Del Parque, Fenix, Guadalajara, Ideal, Paris, Imperial. León: Condesa, Frances, Mexico. Mazatlán: Belmar, Central Mazatl. Mérida: Colon, Gran, Itza, Mérida, Mexico City: Marlton, De Cortes, Diana, Geneve, Gillow, Isabel, L'Escargot and Garden Courts, Maestric, Maria Cristina, Montejo, Ontario. P.A., Plaza, Reforma, Regis, Ritz, Waldorf. Monterrey: Colonial, Gran Hotel Ancira, Monterrey. Saltillo: Arizpe y Sainz, Casa Colonial, Casa Lozano. Tampico: Imperial, Angleterra, Rivera. Vera Cruz: Diligencias, Imperial, Mocambo, Villa del Mar.

American Express Representatives: Mexico City: Wells Fargo, Plaza de la Republica 55; Wells Fargo, Avenida Madero 14.

Local fiestas occur throughout Mexico every day and are usually celebrated with native songs, dances, fireworks, puppet shows, sports, bullfights, cockfights and, often, religious ceremonies, although each town has its own holiday characteristics. For information regarding events at points along his itinerary, the traveler may inquire of any American Express representative, as fiesta dates are sometimes changed or cancelled and the list below is necessarily quite limited. New Year's festivities are held throughout Mexico. Picturesque Fiesta at Jojutla, between Cuernavaca and Taxco, January 1-7. Celebration of founding of city at León, January 17. Tarascan dances, rodeos, honoring Our Lord of the Rescue at Tzintzuntzan, February 1. National holiday in anniversary of the constitutions of 1857 and 1917, February 5. Carnival Week, immediately preceding Lent, celebrated everywhere with notable

carnival activity at Mexico City, Mazatlán, Mérida, Oaxaca, Taxco, Vera Cruz and Huejotzingo, two hours from Mexico City, where a drama is enacted from dawn to sundown of Shrove Tuesday depicting 1862 victory over French with sham battles, dances, burning of thatch hut. Fiestas on the first Friday of Lent at Tepalcingo and Chalma. Patron saint of San Gregorio Acapulco, between Xochimilco and Tláhuac, honored March 12. During Holy Week, Indians perform the Last Supper at Tzintzuntzan on Maundy Thursday; Santa Anita, outside Mexico City, has a flower festival on Good Friday, while at Tlacolula splendid fiesta activities include plume dance. Serenades, bullfights, fireworks included in commemoration of founding of San Marcos, outside Aguascalientes, April 20-May 5. Celebration of 1862 victory at Acapulco May 1-8. Day of the Holy Cross, May 3, celebrated throughout Mexico. National holiday on May 5 in honor of 1862 victory. Corpus Christi celebrated most notably in the cathedral at Mexico City. Cockfights, horse races, religious ceremonies honor St. Anthony at Rio Verde on June 10-18. Aquatic events at Guanajuato June 23-July 7. Commemoration at Oaxaca of death of Miguel Hidalgo y Costilla on July 30. Our Lady of El Carmen honored at Motul, near Mérida, July 8-16. National holiday in honor of Alvaro Obregón, military hero, July 17. National holiday in honor of Benito Juárez, reform leader, July 18. Fair and fiesta at Saltillo August 1-6. Bullfights, horse races, cockfights at Huamantla August 12-21. Commemoration of treaty signing at Córdoba August 22-26. Virgin of Remedies Day at San Bartolo Naucalpan, near Mexico City, September 1-8. Fiesta at Chihuahua September 10-15. National holiday, equivalent to U. S. Fourth of July, in commemoration of Hidalgo's declaration of independence on September 16. Fiesta at Mérida September 27-October 14. San Miguel Day at Taxco September 29. St. Francis of Assisi honored at Pachuca October 1-12. National holiday October 12. All Saints' Day and All Souls' Day celebrated throughout nation November 1-2. National holiday in commemoration of 1910 revolution's start November 20. Patron saint of the republic, the Virgin of Guadalupe, honored at Guadalupe December 3-13, December 12 being the most important day of festivities. Fiesta in honor of the Virgin of Guadalupe at Monterrey December 12-26. Nine nights of festivities precede the Christmas season throughout Mexico.

Travelers wishing to motor to Mexico City may drive over the Pan American Highway from Laredo, Texas, a distance of 763 miles. The Missouri Pacific Railroad operates through Pullman service daily from St. Louis via Laredo to Mexico City and the Pennsylvania Railroad offers similar service from New York City.

CENTRAL AMERICA

British Honduras

Hot and humid, with average monthly temperatures ranging from 76 in January to 83 in August, days about 3° warmer, nights about 3° cooler. Rainfall is moderate to extremely heavy, with June to November the wettest months. Belize has an annual rainfall of 84 inches. Best traveling time: November to May.

Monetary unit: British Currency.

Principal city: *Belize*.

Entry requirements: Passport. Health certificate, smallpox vaccination not required but officially advised.

Airlines: TACA (Belize).

Steamships: To Belize: Canadian National Lines (Brit), Crenshaw Bros. Produce (Amer), United Fruit Lines (Amer).

Hotel: Belize: Palace.

National Holiday September 10.

Costa Rica

Coast lands are hot, central plateau is equable, and the higher elevations are cool, sometimes cold. Seasonal rains are heavier in the highlands, but throughout the country from May to November extreme rainfall makes travel in some sections impossible. San Jose has an average daily temperature of 72. Best traveling time: December to April.

Monetary unit: colon. Coins used: colon; centimo (50, 25, 10, 5, 2). One colon equals 100 centimos.

Principal cities: Limon, *San Jose*.

Entry requirements: Passport, visa, health certificate, smallpox vaccination, police certificate.

Airlines: PAA (San Jose), TACA (Limon, San Jose).

Steamships: To Limon: Grace Line (Amer), United Fruit Lines (Amer).

Hotels: Limon: Park, Pension Costa Rica. San Jose: Continental, Europa, Gran Hotel Costa Rica, Metropoli, Rex.

Feast of St. Peter and St. Paul celebrated June 29. August 2 is the Feast of Our Lady of the Angels; the festivities at Cartago are the climax of a pilgrimage. September 15 is Independence Day. In village squares bullfighting, good-natured and not deadly, is performed with no harm to the bull. Jaguar and puma hunting is available in Guanacaste province, with smaller animals, such as mountain goat, deer, and wild boar, also found. There is no closed season, but during rainy season ground is difficult to traverse.

El Salvador

Hot in the lowlands, warm but equable in higher elevations. The rainy season lasts

from May to November, the dry from December to March, with both the coolest months, December and January, and the hottest, March and April, in this period. San Salvador ranges from a daily average high of about 85 in December to an average daily low of about 59 during January. Best traveling time: December to March.

Monetary unit: colon. Coins used: colon; centavo (50, 25, 20, 10, 5, 3, 1). One colon equals 100 centavos. U. S. currency is used freely with no exchange regulations.

Principal city: *San Salvador*.

Entry requirements: Passport, visa plus consul endorsement, health certificate, smallpox certificate. For visits of less than eight days, if tourist has a PAA tourist card, he needs only smallpox vaccination and transportation ticket for return or to country beyond admitting entry.

Airlines: PAA, TACA (Both to San Salvador).

Steamships: To La Libertad: Grace Line (Amer), Pacific S & N Co. (Brit), Standard Fruit (Amer), United Fruit (Amer).

Hotels: San Salvador: Astoria, Centro Americano, Continental, Nuevo Mundo.

From July 25 to August 6, the Feast of the Holy Saviour is a colorful, gay fiesta in San Salvador, with numerous floats drawn through the streets. Last day of the festival is devoted to religious ceremonies. November 5 is Independence Day. On December 12, Day of the Indian, children dress in genuine Indian costume, march in processions. La Libertad has fine surf bathing.

Guatemala

In the highlands there is small temperature variation throughout the year, with cool nights and equable days. The coastal areas are hot, damp, with an average temperature of 80. During the coldest months, December and January, Guatemala City has an average temperature of 60, with 6 the average during the hottest months, March and April. June and September are the wettest months, the rainy season lasting from May to November, with most rainfall on the Atlantic coast. Guatemala City has 50 inches of rain annually. Best traveling time: November to May.

Monetary unit: quetzal. Coins used: quetzal; centavo (25, 10, 5, 2, 1, ½). One quetzal equals 100 centavos.

Principal cities: Coban, *Guatemala City*, Totonicapan.

Entry requirements: Tourist card.

Airlines: PAA (Guatemala City).

Steamships: To Puerto Barrios: Crenshaw Bros. Produce (Amer), United Fruit Lines (Amer).

Hotels: Guatemala City: Astoria, Gran, Palace, Pension Gueroult, Pension Royal (none).

National Fair in Guatemala City for week starts on the third Sunday in November. During this holiday races are held in Parque Aurora. Excellent deep-sea fishing exists off Puerto Barrios. For hunters, the Coban region has much game, September to January being the closed season. Numerous wooded areas offer fine hunting almost anywhere in the country. Fiestas are held at Coban during Holy Week and for St. Dominic, August 4.

Honduras

Although hot and humid in the coastal lowlands, the climate inland, particularly at 3200 feet (around Tegucigalpa), is ideal, despite occasional summer temperatures of 90. The highland rainy season lasts from the end of May through November, the dry season from December to May. Midland temperature averages 85, but lower humidity makes this seem cooler than the coast, with an 80 temperature or more during the rainy season, mid-September through February. During the dry season, March to mid-September, coastal temperatures of 90 are oppressive owing to the high humidity. Best traveling time: November to May.

Monetary unit: lempira. Coins used: lempira; centavo (50, 20, 10, 5, 2). One lempira equals 100 centavos.

Principal cities: San Pedro, Tegucigalpa.

Entry requirements: Passport, visa, smallpox vaccination certificate.

Airlines: PAA (Tegucigalpa), TACA (San Pedro, Tegucigalpa).

Steamships: To Puerto Cortez: United Fruit (Amer).

Hotels: San Pedro: Internacional, Roosevelt. Tegucigalpa: Las Americas, Ritz, Shanghai, Tegucigalpa Palace.

Villages honor patron saint, San Pedro having one of the most picturesque ceremonies from June 23 to July 4; Tegucigalpa honoring St. Benedict during Holy Week, holding the Feast of the Immaculate Conception December 8 to January 1. Hunting, fishing, sailing, swimming all very good.

Nicaragua

Hot on the coast, mild inland, temperatures drop to cool, even cold, in the mountains, depending on altitude. Seasonal variations are slight, the temperature ranging from 60 to 90 across the country, with extreme heat felt in the highlands in the middle of the day only. Along the Atlantic, rainfall is light to moderate all year, the Caribbean coast being one of the world's rainiest places, while the Pacific has wet and dry seasons. December to May is the dry season at Managua. Best traveling time: December to May.

Monetary unit: cordoba. Coins used: cordoba; centavo (50, 25, 10, 5, 1, ½). One cordoba equals 100 centavos.

Principal cities: Leon, Managua.

Entry requirements: Passport, visa, health certificate, police certificate.

Airlines: PAA, TACA (Both to Managua).

Steamships: To Bluefields: Standard Fruit & Steamship Co. (Amer), United Fruit (Amer).

Hotels: Leon: Metropolitano. Managua: Gran, Lido Palace, Pan-American, Sevilla.

Santo Domingo, most impressive fiesta, celebrated August 1 to 10 in Managua. Unique ceremonies honor Holy Week in Leon. Cockfights Saturdays and Sundays throughout country. Bullfights, with best at Managua, held the same time, but torreador attempts to ride the bull, not kill it.

Panama and Panama Canal Zone

Cristobal's temperatures, with 83 to 85 as daily high averages and 74 to 77 as daily low averages, are typical of Panama and the Zone. Mild breezes temper the climate, making the nights cool. Rainfall is heavier and more frequent on the Atlantic side than the Pacific, the season lasting from mid-May to December, with heaviest showers in October and November. Although the Atlantic side has showers even during the dry season, this period is the best traveling time: December to April.

Monetary unit: balboa. Coins used: balboa; centavo (50, 25, 10, 5, 2½, 1). One balboa equals 100 centavos. United States currency is extensively used.

Principal cities: Ancon, Balboa, Colon, Cristobal, Panama City.

Entry requirements: Tourist card.

Airlines: PAA (Balboa, Cristobal, Panama City), TACA (Balboa), Braniff Airways (Balboa).

Steamships: To Balboa: American President Lines (Amer), Grace Line (Amer), United Fruit Lines (Amer). To Cristobal: American President Lines, Chilean Line (Chile), Elliot Line (Amer), Grace, Lykes Line (Amer), Moore-McCormack Lines (Amer), Standard Fruit (Amer), United Fruit. To Zone: American President Lines, Chilean Line, Furness Line (Brit), Grace Line, Holland-America Line (Dutch), Interocean (Norweg), Johnson Line (Swed), Knutsen Line (Norweg), Lykes Line, Moore-McCormack Lines, New Zealand Shipping Co. (Brit), Pacific Navigation Co. (Brit), Panama Line (Pan), Prince Line (Brit), Royal Mail Lines, Ltd. (Brit), Royal Netherlands Line (Dutch), Standard Fruit and Steamship Co., United Fruit.

Hotels: Ancon, Balboa and Panama City are virtually one extended city, the best hotel being the government-owned one at Ancon, the Tivoli, one mile from Panama

City. In Panama City, however, there are also the hotels Central, Colon, Colombia, and Internacional. Cristobal and Colon (geographically the same, divided by Eleventh Street, with Cristobal the U.S. town): Carlton, Washington.

For four days preceding Ash Wednesday, Carnival is held and is at its most spec-

tacular at Panama City, where men and women dress in native costumes and Indians present dances. Racing at Panama City all year, each Sunday; dog races during the summer. Splendid fishing off Pearl Islands, off San Blas coast, in Laguna de Chiriqui, with Pacific better than Atlantic during winter.

SOUTH AMERICA

Argentina

Seasons are the opposite of the United States, winter being from June to September. In the provinces of Buenos Aires, Corrientes, Entre Rios, and Santa Fe, summer temperatures rise to the 90's, but the winters are mild. The Andean Plateau is arid in the north, and the south has cold winds and the greatest rainfall. In this region temperatures vary greatly between night and day. Central Argentina is largely arid, with summer temperatures often above 100; winters are colder than in the east. At Buenos Aires, the days from December to February are warm, often in the lower 80's, the nights cool or mild. Best traveling time: September to June.

Monetary unit: gold peso (nominally); paper peso (in actual circulation). Coins used: centavo (20, 10, 5, 2, 1). One peso equals 100 centavos.

Principal cities: Bahia Blanca, Buenos Aires, Cordoba, La Plata, Mendoza, Rosario, Santa Fe, Tucuman.

Entry requirements: Passport, visa, health certificate, smallpox vaccination, letter of recommendation, police certificate, three photographs. Authorization must be obtained from Argentina, applicant paying cable expense.

Airlines: PAA-PANAGRA (Buenos Aires, Cordoba, Tucuman, Salta), Braniff Airways (Buenos Aires), British South American Airways, Ltd.

Steamships: To Buenos Aires: Blue Star Line (Brit), Delta Line (Amer), Furness (Brit), Grace Line (Amer), Lykes Line (Amer), Johnson Line (Swed), Prince Line (Brit), Royal Mail Lines, Ltd. (Brit), Westfal-Larsen (Norweg), Wilhelmssen Line (Norweg), American Republics Line (Amer), Boyd, Weir & Sewell (Brit), Moore-McCormack (Amer).

Hotels: Buenos Aires: Alvear Palace, Castelar, City, Continental, Jousten, Nogaro, Phoenix, Plaza, Avenida Palace, Gran. Cordoba: Bristol, City, Plaza, Palace. La Plata: Ardini, Argentino, Savoy. Mendoza: City, Espana, Imperial, Italia, Plaza, Roma. Rosario: Britania, Colonial, Firenze, Gran Hotel America, Palace, Savoy. Santa Fe: Espana, Italiano, Plaza, Ritz, Royal, Tucuman: Espana, Internacional, Savoy.

American Express Offices: Villalonga-American Express Co. S. A. of T. Buenos Aires: Calle Peru 22. Cordoba: Rivera In-

darte 165-71. Mar del Plata: Santiago del Estero 1723-27. Mendoza: Godoy Cruz 147/51. Rosario: Santa Fe 1271. Santa Fe: 25 de Mayo 2100. Tucuman: Munecas 354.

Carnival is held for three days preceding Lent, with the greatest gaiety at popular resorts near Buenos Aires, particularly at Mar del Plata. Independence Day celebrated May 25. At Mendoza a colorful Wine Festival is held about April 1. The Feast of St. Martin, patron of Buenos Aires, is celebrated in that city November 11. At the shrine of Lijun on May 21, the Day of Our Lady of Lijun is honored by pilgrims from all over Argentina. At season's height, horse races are glittering social events, the course at Mar del Plata being famous for its beauty. The Jockey Club holds races at the Hipodromo Argentino in Parque Palermo in Buenos Aires and in San Isidro, near the capital. Excellent skiing as well as mountain climbing can be enjoyed at Nahuel Huapi National Park at San Carlos de Bariloche. International Regatta is held at Tigre, 25 miles from Buenos Aires, November 11. Polo matches near Parque Palermo in Buenos Aires are held in late spring and summer.

Bolivia

In the Amazonian lowlands the temperature averages 80, with the Yungas region (up to 8,000 feet) more temperate. The punas, or steppes, 11,000 to 14,000 feet high, have a temperature averaging 50. Rainfall around La Paz is very light during the winter, July to September, and the rainy season extends from January to May, consisting usually of tropical showers rapidly followed by clear skies. With no unpleasant temperature extremes, Sucre has an agreeable climate. January has the warmest days, July the coolest, with an annual mean temperature of 57. Best traveling time is the Bolivian autumn, May and June.

Monetary unit: boliviano. Coins used: boliviano (20, 10, 1); centavo (50, 20, 10, 5). One boliviano equals 100 centavos.

Principal cities: La Paz, Sucre.

Entry requirements: Passport, Bolivian tourist passport, health certificate, smallpox vaccination, letter of presentation from travel agency or steamship agency.

Airlines: PAA-PANAGRA (La Paz), Braniff Airways (La Paz).

Hotels: La Paz: Gran Hotel Paris, International House, Sucre Palace. Sucre: Colon, Hispanoamericana, Londres, Real.

Carnival for three days preceding Ash Wednesday, with most elaborate celebrations at Cochabamba, Sucre, Santa Cruz. Copacabana on shore of Lake Titicaca one of the most spectacular religious festivals in South America begins August 1, lasting several days. Independence Days August 5-7) celebrated widely. Indians bring numerous handiworks to Alacitas fair January 24-29 at La Paz.

Brazil

Although seasons are the opposite of the United States, the vast territory and topographical extremes present a varied climate. The extreme north has an equatorial climate, although coastal breezes bring coolness, even in summer. In general, the northeast and central states, while subtropical, have temperatures comparable to New York in summer, only seldom rising higher. The mountain regions inland are at times cold but usually cool. In Rio de Janeiro, the winters are warm and mild, with summer days averaging in the low 70's, February generally the warmest month. Winter is the dry season, summer the wet, and in the far north the heaviest rains fall from December to April or May. In the south central and southern states rainfall is more equally distributed throughout the year, the summer still having more than winter, however. From the mouth of the Amazon to Natal the heaviest rains come from March to May, usually ending abruptly each day around 4:30 p.m. From the state of Pernambuco to Bahia, the rainy season is in late autumn and winter, May and June being rainiest, October to December driest. Best traveling time: June to September.

Monetary unit: cruzeiro. Coins used: cruzeiro (2, 1); centavo (50, 40, 30, 20, 10). One cruzeiro equals 100 centavos.

Principal cities: Arassuahy, Belem, Bello Horizonte, Campinas, Campos, Caratinga, Curitiba, Fortaleza, Itaperuna, Juiz de Fora, Maceio, Niteroi, Parahiba, Pelotas, Petropolis, Porto Alegre, Recife, Rio de Janeiro, Santo Amaro, Santos, São Paulo, São Salvador (Bahia), Theophilo-Otoni.

Entry requirements: Passport, visa, health certificate, smallpox vaccination, four photographs.

Airlines: PAA-PANAGRA (Belem, Coarumbá, Natal, Rio de Janeiro, São Paulo), TACA (Belem, Rio de Janeiro, São Paulo), Braniff Airways (Rio de Janeiro, São Paulo), British South American Airways, Ltd., Panair do Brasil.

Steamships: To Bahia, Rio de Janeiro, Santos: American Republics Line (Amer), Boyd, Weir & Sewell (Brit), Blue Star Line (Brit), Delta (Amer), Furness (Brit),

Johnson (Swed), Moore-McCormack (Amer), Prince Lines (Brit), Royal Mail Lines, Ltd. (Brit), Wilhelmsen Line (Norweg), Westfal-Larsen (Norweg), Lloyd Brasileiro (Brazil).

Hotels: Belem: America, Central, Grande. Bello Horizonte: Avenida, Grande, Sul Americano. Fortaleza: Excelsior, Palace. Maceio: Bela Vista, Grande Ponto. Petropolis: Casino Palace, Central, Damas, Europa, Reis, Porto Alegre: Grande, Majestic, Novo Grande, Novo Jung. Recife: Central, Gloria, Grande, Palace, Parque, Recife. Rio de Janeiro: American, Avenida, Central Copacabana Palace, dos Estrangeiros, Gloria, Itajuba, Luxor, Natal, Palace, Pax. Santos: Avenida Palace, Atlantico, Belvedere, Parque Baleario, Santos. São Paulo: City, Esplanada, Palace, Plaza, Rex, São Bento, Suisso, Terminus. São Salvador (Bahia): Grande, Meridional, Nova Cintra, Palace.

American Express Office: Rio de Janeiro: 120 Avenida Rio Branco. (S.A.V.I.)

The Carnival for three days preceding Lent reaches its most spectacular height in the famed celebrations at Rio de Janeiro. Every Sunday in October, in Rio, the religious festival of Our Lady of Penha is held. Virtually all coastal cities have excellent bathing beaches.

British Guiana

Hot and humid; cooler on the coast than inland. Coastal temperatures in January average 78, in September and October 81, with about a 6° variation between day and night. Inland, January temperatures average about 81, September and October 84, with a 10° daily variation. Rainfall is moderate to extremely heavy, with greatest precipitation along the coast. Heaviest rains occur during May, June, and July. Best traveling time: December to April.

Monetary unit: British currency.

Principal city: Georgetown. (Also called Demerara).

Entry requirements: Passport and visa.

Airlines: PAA (Georgetown).

Steamships: To Georgetown: Alcoa (Amer), Canadian National (Brit), Furness (Brit), Royal Netherlands SS Co. (Dutch), Surinam Navigation Co. (Dutch).

Hotels: Georgetown: Demerara Ice House, Park, Regent, Tower.

In February, on the sugar estates, the Tadjá, an Indian celebration, is held. Children parade on Empire Day (May 24). Other British holidays are celebrated. The first Monday in August is observed as the Day of Emancipation of Slaves. In the heart of the tropical region are Kaeteur Falls, five times the height of Niagara.

Chile

In the extreme north, the days are hot, the nights warm, on the coast and cool

in the interior. Central Chile has a sunny climate comparable to southern California, the warmest summer days cooled by breezes; winter usually brings steady rain. Southward in the lake regions and central Chile, the climate is similar to the Pacific Northwest, with January to March the best time to visit this area, Chile's seasons being the reverse of the United States. In the southern archipelago and around Punta Arenas, fogs and storms keep the mean temperature about 50 in the warm season. At Valparaiso, warmer than Santiago in the southern winter and cooler in summer, the average daily high is 73 during January. Best traveling time: October to April.

Monetary unit: peso. Coins used: peso (100, 50, 20); centavo (20, 10, 5). One peso equals 100 centavos.

Principal cities: Antofagasta, *Santiago*, Valparaiso, Vina del Mar.

Entry requirements: Passport, visa, police certificate, health certificate, smallpox vaccination, three photographs.

Airlines: PAA-PANAGRA (Arica, Antofagasta, Santiago).

Steamships: To Antofagasta and Arica: Chilean Line (Chile), Grace Lines (Amer), Lykes (Amer), Pacific S&N Co. (Brit). To Chanaral: Grace Lines. To Valparaiso: Same as Antofagasta plus Isthmian Line (Amer), West Coast Line (Danish), Westfal-Larsen (Norweg).

Hotels: Antofagasta: Londres, Maury. Santiago: Bidart, Carrera, Claridge, Crillon, Grand, Mundial, Oddo, Ritz, Savoy, Splendid, Victoria. Valparaiso: Adria, Astur, Florida, Herzog, Palace, Paris, Royal, Lebell, Liguria, Rolfo. Vina del Mar: Alcazar, Embassy, France, O'Higgins, Maria Antonieta, Merlier, Park, Pension Europea, Villa Bettina, Playa.

The Carnival at Lent, observed in most of South America, attracts little attention in Chile. The Carnival of Spring, however, is celebrated October 12 with floats and parades. The Day of St. Peter and St. Paul is celebrated June 29 in all ports with religious processions and pageants. Skiing season lasts from middle of June to November, and Farrellones, site of international skiing contests, has fine facilities. Portillo, northeast of Santiago, boasts the country's most luxurious winter hotel. Horse racing at Vina del Mar is held during summer, September is the rodeo season.

Colombia

Depending on latitude, Colombian climate ranges from torrid heat in some coastal cities to freezing temperatures in the high mountains. Towns on the coast and river ports are hot throughout the year. Summer is the dry season, winter the wet, but the seasons are not uniform throughout the country. Best traveling

time: March to May; September to November.

Monetary unit: peso. Coins used: peso centavo (50, 20, 10, 5, 2, 1). One peso equals 100 centavos.

Principal cities: Barranquilla, *Bogota*, Medellin.

Entry requirements: Passport, visa, health certificate, police certificate, letter of recommendation. Authorization must be obtained from Colombia, communication being paid for by applicant. Proof of birth and, if married, proof of marriage status. Transits stopping less than twenty-four hours need no letter of recommendation but must have round-trip ticket or through transportation to country beyond that will grant entry.

Airlines: KLM (Barranquilla), PAA-PANAGRA (Barranquilla, Cali), TACA (Bogota, Medellin).

Steamships: To Barranquilla: Grace Line (Amer), Lykes Lines (Amer), Moore-McCormack (Amer), United Fruit (Amer).

Hotels: Barranquilla: Astoria, de Prado Tivoli, Moderno. Bogota: Atlantico, Astor Claridge, Granada, Regina. Medellin: Bristol, Europa, Berlin.

Miracle plays at Popayan January 6 and ceremonies during Holy Week outstanding religious festivals. At Bogota, almost every Sunday during February and March, bullfights are held.

Dutch Guiana (Surinam)

High humidity, usually hot, the lowest temperature ever recorded being 62. From January to March at Paramaribo on the coast, the average temperature is 78, rising to an average of 81 during September and October. There is a daily variation of 7° on the coast and 10° inland, where temperatures are slightly cooler. Rainfall is heavy, reaching its maximum from April to July. Best traveling time: September to November; February to April.

Monetary unit: Netherlands currency.

Principal city: Paramaribo.

Entry requirements: Passport, health certificate, smallpox vaccination, police certificate, possession of round-trip ticket or transportation to country beyond granting entry.

Airlines: KLM, PAA, TACA (All to Paramaribo).

Steamships: To Paramaribo: Alcoa (Amer), Royal Netherlands SS Co. (Dutch), Surinam Navigation Co. (Dutch).

Hotels: Paramaribo: Palace, Riverview.

Ecuador

Although situated almost on the equator Ecuador has a varied climate because of its mountain ranges. Owing to Pacific trade winds and the Humboldt Current, the tropic

ral coastal region averages 83°, but the trans-Andean region is densely tropical, hot, and with much rainfall. Temperatures in the Andean plateau range all year from 63 to 70. The dry season extends from June through November, the rainy season from December through April or May, at which time the roads in the south and coastal regions are usually impassable. Best traveling time: June to November.

Monetary unit: sucre. Coins used: sucre (2, 1); centavo (50, 10, 5, 2½, 1). One sucre equals 100 centavos.

Principal cities: Guayaquil, *Quito*.

Entry requirements: Passport, visa, health certificate, smallpox certificate, police certificate, seven photographs, round-trip ticket or sufficient funds to leave or transportation to country beyond that will grant entry. Transits staying less than 72 hours do not require a visa.

Airlines: PAA-PANAGRA (Guayaquil, *Quito*), TACA (Guayaquil, *Quito*), Braniff Airways (Guayaquil, *Quito*).

Steamships: To Guayaquil: Chilean Line (Chile), Furness (Brit), Grace Lines (Amer), Johnson Line (Swed), Lykes Line (Amer), Pacific S&N Co. (Brit).

Hotels: Guayaquil: Grant, Metropolitano. *Quito:* Metropolitano, Savoy.

Carnival preceding Lent offers various Indian dances. Holy Week celebrated with pageantry and Indian customs. Cockfighting in almost all towns, Guayaquil having particularly large pit.

French Guiana (Cayenne) and Inini

With the lowest temperature on record 55, the highest 97, the climate is consistently hot and humid, with January temperatures averaging 79, September and October 82. The daily variation is about 5°. Rainfall is extremely heavy, the maximum precipitation from December to June, with May the peak month. Best traveling time: March, April; September, October.

Monetary unit: French currency.

Principal city: *Cayenne*.

Entry requirements: Passport, visa, health certificate, smallpox vaccination.

Airlines: PAA (Cayenne).

Steamships: To Cayenne: Alcoa (Amer), Surinam Navigation Co. (Dutch).

Hotels: Cayenne: Grand Hotel Verdun, Palmistes.

Paraguay

Paraguay, although in the tropics, is nevertheless mild in general, except northward. December to February are the warmest months, summer lasting from October to March. When the wind blows from the north, the heat is intense. In the environs of Asunción during June, the coolest month, the temperatures average 55. Al-

though there is no set rainy season, thunderstorms around Asunción occur with violence during summer. Best traveling time: April to September.

Monetary unit: guaraní. Coins used: peso (10, 5, 2, 1); centavo (50, 25, 20, 10, 5, 1). One peso equals 100 centavos. Argentine currency is extensively used.

Principal cities: *Asunción*, Villarrica.

Entry requirements: Passport, visa, police certificate, smallpox vaccination, health certificate, examination for trachoma.

Airlines: PAA-PANAGRA (Asunción), Braniff Airways (Asunción).

Hotels: Asunción: Argentine, Colonial, Gran Hotel del Paraguay.

Feast of San Blas, patron saint of the republic, celebrated February 3. Spring festival, a student's carnival, held September 21. Excellent hunting for jaguars, wild hogs, deer, and game birds, in the Chaco region.

Peru

From June to November, the coastal region is swept by fogs and heavy clouds, with the temperature rarely below 55. The coast is arid but suffers no extremes in heat and cold, summer temperatures ranging in the 90's for the December to May period. The Amazon basin is hot, the Andean area cold depending on the altitude, and temperatures change rapidly with increased elevation. In the sierra zone, October to April is winter and wet, May to September is summer and dry, reversing the coastal seasons. Noon temperatures are 80 to 85 at 3,000 to 8,000 feet but the nights are cool. In the east, at 1,000 to 3,000 feet altitude, the temperature ranges between 75 and 95, with mild or cool evenings. It is warmer in the lowland, and the humidity is frequently high. Best traveling time: November to April.

Monetary unit: sol. Coins used: sol; centavo (50, 20, 10, 5, 2, 1). One sol equals 100 centavos.

Principal cities: Arequipa, Callao, *Lima*, Trujillo.

Entry requirements: Passport, visa, health certificate, smallpox vaccination, police certificate. Transients need only valid passport.

Airlines: PAA-PANAGRA (Chiclayo, Talara, *Lima*), Braniff Airways (*Lima*).

Steamships: To Callao: Chilean Line (Chile), Grace Lines (Amer), Johnson Line (Swed), Lykes Lines (Amer), West Coast Line (Dan).

Hotels: Arequipa: Arequipa, Quinta Bates, Castro, Collins. Callao: Italia, Lima Country Club. *Lima:* Gran Hotel Bolívar, Francia e Inglaterra, Gran, Leon, Gran Hotel Maury, Plaza, Country Club (in San Isidore district). Trujillo: Edificio Jacobs, Nuevo Americano.

Carnival at Lima for three days preceding Lent, but best fiesta is June 24, at nearby plains of Amancaes. People attend from all over Peru, wearing regional costumes, dancing, celebrating. Pear Festival (January 6) at Tiabaya, near Arequipa. Bullfights at Lima each Sunday, December to February; horse racing April to December; cockfighting popular.

Uruguay

Winter is from June to September, with temperatures averaging 52 at Montevideo during the coldest months, June and July. During summer, the hottest months, January and February, average 73 and while there are no extremes in the weather, the temperature often changes rapidly with sudden, strong winds. Rainfall is uniform throughout the year, although August and September are slightly wetter than other months. Best traveling time: October to May.

Monetary unit: peso. Coins used: peso (5, 1); centesimo (50, 20, 10, 5, 2, 1). One peso equals 100 centesimos.

Principal cities: Montevideo, Paysandu.

Entry requirements: Passport, visa, police certificate.

Airlines: PAA-PANAGRA (Montevideo), TACA (Montevideo), British South American Airways, Ltd.

Steamships: To Montevideo: American Republics Line (Amer), Blue Star (Brit), Boyd, Weir & Sewell (Brit), Delta Line (Amer), Furness Line (Brit), Johnson Line (Swed), Moore-McCormack (Amer), Prince Line (Brit), Royal Mail Lines, Ltd. (Brit), Westfal-Larsen Line (Norweg), Wilhelmsen Line (Norweg).

Hotels: Montevideo: Centenario, Cervantes, Florida, Gran Hotel Espana, Juncal, La Alhambra, Nogaró, Palacio Salvo, Parque, Piramides, Ritz.

American Express, Rep.: Montevideo: R. Moor-Davie & Co., Convención 1455.

Three-day carnival preceding Lent is colorful festival, with many visitors arriving in Montevideo for celebrations. January 6, the Day of Kings, or Children's Day is special festival for youngsters; comic, colorful celebrations are held in Montevideo at the Centennial Stadium. In January, international horse races, tennis matches, national swimming competitions

are held in Montevideo; international yacht races, rodeos in March; regattas in April. Montevideo has numerous beaches, the most popular, Playa Ramirez, being only fifteen minutes from downtown. Paysandu, Uruguay's second city, 298 rail miles from Montevideo, has a population of only 31,000.

Venezuela

Although Venezuela lies wholly in the tropic zone, the Andes create climatic zones with temperate weather found a 7,000 to 9,000 feet. This topography modifies the seasons, but in general the wet season lasts from May to November, the rest of the year being the dry season. During December, January, and February, the coldest months, the average low is around 40. On the Caribbean coast and in the Lake Maracaibo basin, the temperature is rarely below 64, with 97 the highest average. Low and high temperature at Caracas are 61 and 72 respectively. In general, rainfall on the coast is light, but the Andes affect this distinctly, as Caracas has a light average rainfall while Merida receives heavy rains, the annual average being over 72 inches. Best traveling time: November to May.

Monetary unit: bolivar. Coins used: bolivar (100, 20, 10, 5, 2, 1); centimo (50, 25, 12½, 5). One bolivar equals 100 centimos.

Principal cities: Caracas, Maracaibo.

Entry requirements: Passport, smallpox vaccination, health certificate, police certificate, three full-face photographs.

Airlines: KLM (La Guaira, Maracaibo, Maturin); PAA-PANAGRA (Coro, La Guaira, Maracaibo, Maturin).

Steamships: To Carupano: Alcoa (Amer). Royal Netherlands Steamship Co. (Dutch). To Ciudad Bolívar: Royal Netherlands Steamship Co. To Cumana: Alcoa, Grace Lines (Amer). To Guanta and Maracaibo: Alcoa, Grace, Royal Netherlands, Lyke Lines (Amer). To La Guaira and Puert Barrios: Alcoa, Grace, Lykes, Moore-McCormack (Amer), Royal Netherlands. To Puerto La Cruz: Alcoa, Grace, Lykes.

Hotels: Caracas: Avila, Cuimera, Majestic, Melrose, Palace, Plaza, Royal, Waldorf. Maracaibo: Americano, Granada, Scandia, Victoria, Zulia.

Carnival on Monday and Shrove Tuesday. Bullfights almost every Sunday at Caracas from November to March.

WEST INDIES

Bahama Islands

Warm and humid, with January day averages 76, night 67. In July and August the days average 88, with the nights around 76. Rainfall is light to moderate, unevenly distributed throughout the islands, with wettest months May and June,

September to November. Best traveling time: November to May.

Monetary unit: British currency.

Principal city: Nassau.

Entry requirements: Tourist card, round trip transportation or transportation to country beyond granting entry.

Airlines: PAA (Nassau).

Steamships: To Nassau: Canadian National (Brit), Pacific Steamship Co. (Brit), Royal Mail Lines, Ltd. (Brit), Seaway Line (Brit).

Hotels: Nassau: British Colonial, Cumberland House, Fort Montagu Beach, Lucerne, Parliament Apartment, Prince George, Royal Victoria, Windsor, Charlotteville Guest House, Harbour View, Lofthouse and Dean Cottages, Rozelda Apartment Hotel.

Bathing, boating, sailing, fishing, all excellent. Riding, cycling, carriage riding available over colorful roads and trails. Horse racing at Montague Race Track in winter. Flamingo and Star Class boat races in February. Outdoor carnival, "Johnny Canoe," a native festival, celebrates arrival of New Year at Nassau with street dancing, floats, costumes, music and tom-toms. At Harbour Island, beach is pink, powdered coral.

Barbados

Warm, occasionally hot, the average temperatures range from 77 during January to 81 in August. Rainfall is moderate, August to October being the wettest months. Best traveling time: November to May.

Monetary unit: British currency.

Principal city: Bridgetown.

Entry requirements: Passport.

Steamships: To Bridgetown: Alcoa (Amer), American Republics Line (Amer), Canadian National (Brit), Moore-McCormack Lines (Amer), Royal Netherlands (Dutch).

Hotels: Bridgetown: Balmoral, Hastings, Marine, Ocean View, Royal Windsor.

British holidays, such as Empire Day (May 24), the King's Birthday (in June), and Boxing Day (December 26) are celebrated.

Bermuda

Humid and warm, January, February and March are the coolest months with the daytime temperatures about 68, nights about 57. From July to September, the warmest season, the days average 85, nights 73. Infrequently, temperatures rise to the 90's, drop to the 40's. Rainfall is heavy, with frequency distributed fairly evenly throughout the year. Best traveling time: November to May.

Monetary unit: British currency.

Principal city: Hamilton.

Entry requirements: None for U.S. citizens.

Airlines: BOAC, PAA (Both to Hamilton).

Steamships: To Hamilton: Alcoa (Amer), American Export Lines (Amer), Canadian National (Brit), Furness-Bermuda (Brit).

Hotels: Castle Harbor: Castle Harbor.

Hamilton: American House, Bermudiana, Langton, New Windsor, Princess. St. George: St. George.

Splendid bathing, boating, fishing. British holidays, such as Empire Day (May 24), the King's Birthday (in June), and Boxing Day (December 26) are celebrated.

Cuba

In the tropical zone, Cuba nevertheless has a subtropical, pleasant climate ranging from about 60 to 90, the heat being modified inland by mountains and plateaus and on the coast by the constant trade winds. There is rainfall throughout the year, with May to November receiving most, December to April being considered the dry season. Inland, rainfall averages 60 inches annually and the north coast receives somewhat less, the south coast having the most moderate average, 45 inches. Best traveling time: December to April.

Monetary unit: peso. Coins used: peso; centavo (40, 20, 10, 5, 2, 1). One peso equals 100 centavos. U.S. currency is extensively used at face value on par with Cuban money.

Principal cities: Camaguey, Cienfuegos, Havana, Matanzas, Sancti Spiritus, Santa Clara, Santiago.

Entry requirements: Tourist card.

Airlines: Braniff Airways (Havana), Eastern Air Lines (Havana), KLM (Camaguey, Havana, PAA (Camaguey, Cienfuegos, Havana, Manzanillo, Santiago), TACA (Havana).

Steamships: To Cienfuegos: Lykes Lines (Amer), United Fruit (Amer). To Havana: American President Lines (Amer), Boyd, Weir & Sewell (Brit), Chilean Line (Chile), Cuba Mail Line (Amer), Lykes Lines, Panama-Pacific (Amer), Standard Fruit (Amer), Stoddard-Caribbean (Amer), Pacific Steam Navigation (Brit), United Fruit, To Santiago: Lykes Lines, Standard Fruit, United Fruit.

Hotels: Cienfuegos: Bristol, La Suiza, San Carlos, Union. Havana: Bristol, Florida, Gran, Inglaterra, La Union, Nacional, Lincoln, Park View, Presidente, Plaza, Royal Palm, Siboney, Sevilla-Biltmore. Matanzas: Gran Paris, Louvre, Sevilla, Velasco. Santa Clara: Central, Florida. Santiago: Casa Grande, Imperial, Venus.

American Express Office: Havana: Paseo de Marti 410.

The lavish, colorful carnival for three days preceding Lent and on the following four Sundays is at its best in Havana, with parades, floats, street dancing, balls. Holy Week celebrations most interesting at Trinidad. Century-old celebrations take place Easter Sunday at Arroyo Arenas, ten miles from Havana, during Feast of Jesus Nazareno. Processions climax pilgrimages to village of Ceiba Mocha February 2 for ceremonies at Candlemas. Villages honor local

saints annually at various appropriate dates with picturesque performances. Horse racing is very popular in Havana from December to March and July to October. Jal alai, a Basque game and one of the fastest in the world, is played in Havana Frontons nightly. Cockfighting held in Havana pits in the afternoon. International yacht races at beginning of year. Deer and wild boar hunting in Camaguey and Oriente provinces from November 1 to December 31. Christmas Eve (Nochebuena) is widely, colorfully celebrated, particularly at Havana. Near Havana are excellent bathing beaches, La Concha being public and popular. About ninety miles off Havana is beautiful Isle of Pines, virtually a tropical garden, where the temperature is never below 58°, rarely above 90°. A popular resort.

Curaçao

Hot and humid, with average January temperatures 79°, September 83°. Daytime temperatures are around 5° warmer than at night. Rainfall is light, with maximum rains from October to January and very little rain the remainder of the year. Best traveling time: November to May.

Monetary unit: Dutch currency.

Principal city: *Willemstad*.

Entry requirements: Passport, health certificate, smallpox vaccination, police certificate, 4 photographs.

Airlines: KLM, PAA (Both to Willemstad).

Steamships: To Willemstad: Alcoa (Amer), Grace Lines (Amer), Holland-American (Dutch), Royal Mail Lines, Ltd. (Brit), Royal Netherlands (Dutch).

Hotels: Willemstad: Americano.

Colorful celebrations at Queen's Birthday (August 31). West of Curaçao lies the island of Aruba, eastward Bonaire; these "ABC" islands form the Dutch West Indies.

Dominican Republic

Hot on the coast, it is cooler inland but with no more than 8° difference in mean monthly temperatures from winter to summer. January averages about 74, August around 81. Summer days are in the high 80's, the nights 10 to 15 cooler, particularly in higher elevations. Rainfall varies from light in southwest to heavy on northern coast, the heaviest rains coming from May to November. The dry season is from December to April, the best traveling time.

Monetary unit: U.S. dollar. Coins used: peso (1, ½); centavo (25, 10, 5, 1). One peso equals 100 centavos. U.S. money is used more than Dominican, is equal in size, denomination, and value.

Principal cities: *Ciudad Trujillo*, Santiago.

Entry requirements: Passport, visa, con-

sular endorsement, health certificate, smallpox vaccination, 5 photographs.

Airlines: KLM, PAA, TACA (All to Ciudad Trujillo).

Steamships: To Ciudad Trujillo: Alcoa (Amer), Bull Lines (Amer), Lykes Line (Amer), Porto Rico Line (Amer), Suwannee Fruit & Steamship Co. (Amer).

Hotels: Ciudad Trujillo: Colon, Fausto, Frances, Jaragua, Presidente, Santiago: Frances, Garibaldi, Gran Hotel Mercedes, Santiago, Sevilla.

Carnival immediately preceding Lent at Ciudad Trujillo and particularly interesting at Santiago. All villages have special fiestas honoring patron saints.

Guadeloupe

Warm and humid, with temperature rising from 74 in January to only 76 as an August average. Daily variation is slight, and at Camp Jacob, elevation 1750 feet, it is about 6° cooler throughout the year. Rainfall is extremely heavy, 90 to 150 inches, with heaviest rains from June to December. Best traveling time: December to May.

Monetary unit: French currency.

Principal cities: *Basse Terre*, Point-à-Pitre.

Entry requirements: Passport, visa, consular endorsement, round-trip tickets or transportation to country beyond granting entry.

Airlines: PAA (Point-à-Pitre).

Steamships: To Point-à-Pitre: Alcoa (Amer), Canadian National SS Co. (Brit).

Hotels: Point-à-Pitre: Des Antilles.

Haiti

The coastal areas are hot, the inland regions cooler with nights sometimes cold in the mountains. Port-au-Prince has an average temperature of 81. From April to June and from September to November, the rains come. The dry season, from December to March is cooler and the best traveling time.

Monetary unit: gourde. Coins used: gourde; centimes (50, 20, 10, 5, 3, 2, 1). One gourde equals 100 centimes. United States currency is used extensively.

Principal city: *Port-au-Prince*.

Entry requirements: Passport and Transit (maximum stay three days) or Tourist (maximum stay thirty days) visa.

Airlines: KLM, PAA (Both to Port-au-Prince).

Steamships: To Port-au-Prince: Alcoa (Amer), Lykes Lines (Amer), Royal Mail Lines, Ltd. (Brit), Royal Netherlands (Dutch), Standard Fruit (Amer).

Hotels: Port-au-Prince: Grand Hotel

Olofsson, La Citadelle, Sans Souci, Splendid.

Carnival for three days preceding Lent offers gayest, most picturesque celebrations. All villages have special localized fiestas of colorful interest. Cockfighting is popular, almost all towns having pits, with fights given Saturdays and Sundays.

Jamaica

Warm, swept by trade winds. The daily temperature variations are approximately 10 to 15, with the January average 76 in Kingston, July's average being 82. In higher elevations the weather is cooler, Hill Gardens averaging 59 in January, 65 in July. Rainfall is strikingly uneven, ranging from light at Kingston (32 inches annually) to extremely heavy at Mooretown (222 inches annually) only thirty miles away. October and November are the rainiest months; January to March the driest. Best traveling time: December to May.

Monetary unit: British currency.

Principal city: *Kingston*.

Entry requirements: Passport. If arriving from Mexico, Central and South America, Cuba, Haiti, or Dominican Republic, visitors must show recent smallpox vaccination, submit to vaccination, or remain in quarantine fourteen days.

Airlines: KLM, PAA (Both to Kingston).

Steamships: To Kingston: Alcoa (Amer), Fyffes Lines (Brit), Canadian National (Brit), Holland-America (Dutch), Pacific Steam Navigation Co. (Brit), Royal Mail Lines, Ltd. (Brit), Standard Fruit (Amer), United Fruit (Amer), New Zealand Shipping Co. (Brit).

Hotels: Kingston: Grenville, Manor House, Myrtle Bank, South Camp Road.

Easter racing carnival at Knutsford Park is colorful, as are the pre-Christmas week festivities. Bathing, boating, fishing splendid.

Martinique

Warm and humid, with January averaging around 76 in Fort de France, 80 from June to November. Daily variation is about 15°. At Morne des Cadets, elevation 1676 feet, temperatures are about 5° cooler all year. Rainfall is heavy in the lowlands, extremely heavy in higher elevations, with August and September the wettest months. Best traveling time: December to May.

Monetary unit: French currency.

Principal city: *Fort de France*.

Entry requirements: Passport, visa, consular endorsement, round-trip transportation or transportation to country beyond granting entry.

Airlines: PAA (Fort de France).

Steamships: To Fort de France: Alcoa (Amer), Canadian National (Brit).

Hotels: Fort de France: de l'Europe, de la Paix.

Puerto Rico

With a coastal temperature average of 73 in winter, 76 in summer, the climate is pleasant the entire year. While the interior and higher altitudes are cooler, there are no extremes in temperatures. Rainfall is heavy but intermittent, some showers lasting only fifteen minutes, with December and January the wettest months. Travel is comfortable the year through, although the major tourist season is December to April.

Monetary unit: Same as United States.

Principal cities: Mayaguez, Ponce, Rio Piedras (suburb of San Juan), Santurce (suburb of San Juan), *San Juan*.

Entry requirements: For U.S. citizens, none.

Airlines: PAA (San Juan).

Steamships: To Mayaguez: American Hawaiian (Amer), Bull Line (Amer), Lykes Lines (Amer), Moore-McCormack Lines (Amer), Porto Rico Line (Amer), Pope and Talbot Line (Amer), Waterman Line (Amer). To Ponce: Same as Mayaguez except for American Hawaiian. To San Juan: Same as Mayaguez.

Hotels: Mayaguez: Cocoanut Grove, Morreda, Palma. Ponce: Belgica, Mella. San Juan: Bellevue, Condado, Escambron Beach Club, Geronimo, Normandie, Palace.

Carnival celebrations preceding Lent. American holidays, such as Washington's Birthday, Fourth of July, and Thanksgiving, are observed. Horse racing at tracks near San Juan; cockfights in island's largest pit at nearby Gallera Borinquen. The Caribbean National Forest is approximately one and a half hours by car from San Juan. The beautiful area has numerous trails for hiking, a dance hall, restaurant, overnight accommodations.

Trinidad and Tobago

Hot and humid. The January temperatures average 77, the September temperatures 80. Throughout the year, night temperatures drop 6° to 10°. Coldest recording known to Trinidad is 56, the hottest 101. Rainfall is moderate to heavy, with February receiving the least, July or August the most. Best traveling time: November to May.

Monetary unit: British currency.

Principal city: *Port of Spain*.

Entry requirements: Passport, smallpox vaccination.

Airlines: KLM, PAA, TACA (All to Port of Spain).

Steamships: To Port of Spain: Alcoa (Amer), Canadian National (Brit), Moore-

McCormack (Amer), Royal Netherlands (Dutch).

Hotels: Port of Spain: de Paris, Hall, New Harbour, Queen's Park. On Tobago: Robinson Crusoe Hotel.

Discovery Day celebrated August 5. The Calypso Fiesta is held in Port of Spain, where songs and dances are rehearsed for the Carnival, two days preceding Lent. Beginning in March and lasting until May, the Hoesin Festival is held, a Moslem celebration. Trinidad has many Mohammedans. Empire Day (May 24) and other British holidays are observed.

Leeward Islands

Temperatures average about 76 in January with about 6° variation between day and night temperatures. August averages 81, with the same daily variations. Winds prevail from the east, varying from ten miles per hour in July to about five in October. Rainfall is moderate in most of the islands, heavy in some localities, with September to November rainiest, February to March receiving minimum precipitations. Best traveling time: December to May.

Monetary unit: British currency.

Principal islands: Antigua, Barbuda, Redonda, St. Kitts, Nevis, Anguilla, Montserrat, British Virgin Islands.

Entry requirements: Passport.

Airlines: PAA (Antigua).

Steamships: To Antigua, St. Kitts, Montserrat: Alcoa (Amer), Canadian National (Brit), Furness Line (Brit), Harrison (Brit).

Hotels: Antigua: Antigua Beach, Globe, Kensington. St. Kitts: Shorty's. Nevis: Bath House.

Albania

Favorable Mediterranean climate. Winters cool along coast with average temperatures in the 50's; cooler inland in higher elevations. Summers warm, in the 70's and 80's. Light rainfall, with driest months in summer. Best traveling time: May to September.

Monetary unit: franca air (gold franc). Coins used: franca air (100, 20, 10, 5, 2, 1); lek (1, $\frac{1}{2}$, $\frac{1}{4}$); quindar (10, 5, 2, 1). One franca air equals 5 lek; one lek equals 40 quindar.

Principal cities: *Tirana*, Shkoder.

No hotel information available at present.

Carnival Sunday, preceding Lent, people masquerade in costumes. Easter continues

Virgin Islands

Warm, humid climate, with winter temperatures averaging about 6° cooler than summer. In January, the days average 82, the nights 72; in August, days average 88, nights 78. Infrequently, temperatures rise to the 90's, drop to the 60's. The rainfall is moderate, around 40 to 50 inches annually, with the heaviest rains September to November. Best traveling time: December to May.

Monetary unit: U.S. currency.

Principal islands: St. Croix, St. John, St. Thomas.

Entry requirements: None for U.S. citizens.

Airlines: PAA (St. Thomas).

Steamships: To St. Croix, St. John, St. Thomas: Alcoa (Amer), Canadian National (Brit), Furness (Brit), Royal Netherlands SS Co. (Dutch).

Hotels: St. Thomas: Bluebeard's Castle, Grand, Taylor's "1829."

Windward Islands

Extremely equable climate. January temperatures average 77, September 80, with a 6° daily variation. The extreme temperatures on record are 93 and 60. Rainfall is heavy to extremely heavy, with maximum rains June to November. Best traveling time: December to May.

Monetary unit: British currency.

Principal islands: Dominica, Grenada, St. Lucia, St. Vincent, plus small group known as Grenadines.

Entry requirements: Passport.

Airlines: PAA (St. Lucia).

Steamships: To all islands: Alcoa (Amer), Canadian National (Brit), Furness (Brit), Harrison (Brit).

Hotels: Dominica: Cherry Lodge.

EUROPE

for three days. In villages, boys light bonfires on mountains in early morn, December 24.

Andorra

Extremely cold winters, with passes closed during winter months. Summers cool, cold in highest altitudes. Very light rainfall. Best traveling time: June to September.

Monetary unit: Spanish peseta, but French franc used extensively.

Principal city: *Andorra*.

Entry requirements: French or Spanish visa.

The tiny, independent republic has only two roads, no railroads. In summertime only, local busses connect with pass at

Spanish border, more easily accessible than French side. The chief occupations are agriculture and smuggling. August 3, the Festa Major is held in capital in native costumes.

Austria—(see Germany)

Belgium

Cold winters (temperatures sometimes as low as 15 or 20) and mild summers with some days in the 80's. Weather the year around is warmer along the coast than inland. Rainfall is light on the coast, moderate inland, with rainiest months in late summer and fall. Best traveling time: May to August.

Monetary unit: franc (with belga in foreign transactions). Coins used: franc (50, 20, 5, 1); centimes (50, 25, 10, 5). One franc equals 100 centimes; five francs equal one belga.

Principal cities: Antwerp, Borgerhout, Bruges, Brussels, Ghent, Liege, Ostend, Schaerbeek, Seraing, Uccle.

Entry requirements: Passport and visa.

Airlines: ABA, KLM (Brussels via Amsterdam), PAA (Brussels), Sabena, Air France (Brussels via Paris).

Steamships: To Antwerp: Black Diamond (Amer), Belgian Line (Belg), Bernstein Line (Amer), Fjell Line (Norweg), Holland-America (Dutch), Inter-ocean (Norweg), Isbrandtsen (Amer), Johnson (Swed), Lykes Lines (Amer), Oranje (Dutch), United States Lines (Amer), Waterman (Amer).

Hotels: Antwerp: Century, Grand, de Londres, Atlanta, Bedford, Georges, Scheers, Splendid. Brussels: Albert Ier, Astoria, Metropole, Plaza. Liege: De Suede. Ostend: De La Easter Plage, Grand Osborn, Littoral, Majestic-Palace.

American Express Offices: Antwerp: 87 Place de Meir. Brussels: 51 Rue Cantersteen.

Throughout Belgium, on three days preceding Ash Wednesday, the Carnival is held, the most picturesque festivities being at Binche. The first Monday after May 1, at Bruges, is the procession of the Holy Blood (of Christ, brought in a vial from the Holy Land during the Crusades), a devout parade in various religious costumes. The houses are decorated with tapestries and flags. On the last Sunday in July at Veurne (Furnes), the Procession of the Penitents is held, in which robed, hooded figures in black sackcloth carry heavy crosses, honoring a piece of the True Cross. August 15, at Ghent, the international boat races are held on the canal to Terneuzen, Holland. On November 3, at St. Hubert, the annual deer hunt is opened with market place ceremonies in medieval costumes honoring the village namesake. December 6 is the gift-giving Feast of St.

Nicholas, December 25 being observed as a religious holiday. International Industries Fair in Brussels during May.

Bulgaria

Winters are cold for this latitude, the January average in Sofia being 28°, with some periods around zero. Summers mild, July temperatures in Sofia averaging 69°, with daytimes in the 70's or 80's. Climate in coastal areas and lower elevations warmer. January is the coldest month, July the hottest. Light rainfall, with heaviest rains in winter near the coast; in summer and fall, farther inland. Best traveling time: May to September.

Monetary unit: lev. Coins used: lev (100, 50, 20, 10, 5, 2, 1); stotinki (50). One lev equals 100 stotinki.

Principal cities: Plovdiv, Sofia, Varna.

Entry requirements: Passport and visa.

Hotels: Sofia: Grand Bulgarie, Slavianska-Bessedia.

Folk dances, parades, picnics celebrate Independence Day, March 3.

Czechoslovakia

Winters are cold, with January and February averages about 30°. Summers are mild, with average temperatures in the 60's, daytimes in the 70's or above. January is the coldest month, July the warmest. Very light rainfall, with maximum rains from May to August, which is, however, the best traveling time.

Monetary unit: koruna (or korona). Coins used: koruna (20, 10, 5, 1); hellere (50, 25, 20, 10, 5). One koruna equals 100 hellere.

Principal cities: Prague, Pressburg.

Entry requirements: Passport and visa.

Airlines: ABA, KLM, PAA (Prague), Air France, Czech Air Lines, Swiss Air.

Hotels: Prague: Alcron, Ambassador, Esplanade, Sroubek.

On St. John's Eve, June 23, young folk dress gaily, light bonfires on hilltops, and dance around fires. International Ski Tournament in High Tatra mountains during February. June 13, the religious pilgrimage to village of St. Antociek in southern Moravia is a colorful pageant with costumes, dances. The Harvest Festival of St. Venceslas, Czech patron saint, is celebrated September 28; particularly picturesque in villages.

Denmark

Cold winters and mild summers, with occasional temperatures below zero in winter and in the 80's in summer. Frost frequent from December to March. Light rainfall, with most rain from July to November. Most equable climate along North Sea

coast, greater variations in temperature being found inland. Best traveling time: May to September.

Monetary unit: krone. Coins used: kroner (2, 1); ore (50, 25, 10, 5, 2, 1). One krone equals 100 ore.

Principal cities: *Copenhagen*, Frederiksberg, Odense.

Entry requirements: Passport and visa.

Airlines: ABA, AOA (Copenhagen), DDL, BOAC (Copenhagen via London), KLM (Copenhagen via Amsterdam), Scandinafr (Copenhagen), Air France (Copenhagen via Paris), Norwegian Air Lines, Swiss Air.

Steamships: To Copenhagen: American Scantic Line (Amer), Black Diamond (Amer), Scandinavian American Line (Danish), Swedish-American Line (Swed), Lykes Line (Amer), United States Lines (Amer).

Hotels: Copenhagen: Grand, D'Angleterre, Terminus, Palace, Turist.

American Express Office: Copenhagen: Vimmelskaftet 42-C.

In seaport towns on Monday preceding Ash Wednesday, the *Fastelavn* boat is drawn through the streets. Musicians play as people dance around the boat. Schools close for the event, May 5, Liberation Day, is celebrated joyously with torchlight parades and dancing in streets. During summer, Royal Theater players hold open-air performances at Dyrehaven. Outdoor symphony is at Tivoli Gardens.

Fire—(See Northern Ireland)

England, Scotland and Wales

Winters cool, cold in southeastern section. Coldest month: January; average temperature about 38, sometimes as low as 10 or 15. West coast warmer than east. Summers mild south of Birmingham and cool north of it. July is the hottest month (63 average in London, 58 in Glasgow) with some days warm and, in southern England, hot. The coasts are cooler than inland sections in summer, and the west coast is cooler than the east. Light rainfall in most areas; moderate on western coast. Most rain falls in October, the driest months being April or May in south and west, February or March in east. Two-thirds of the time the sun is obscured by mists, fogs, and clouds. The sunniest section is southwestern England and the south coast. Best traveling time: May to September.

Monetary unit: pound sterling. Coins used: pound (5, 2, 1); sovereign (1, ½); crown (1, ½); florin; shilling; penny (6, 4, 3, 2, 1, ½); farthing. One pound (or sovereign) equals 20 shillings; one shilling equals 12 pence; one crown equals 5 shillings; one florin equals 2 shillings; one farthing equals ¼ penny.

Principal cities: Aberdeen (Scot), Birmingham, Bristol, Cardiff (Wales), *Edinburgh* (Scot), Glasgow (Scot), Hull, Leeds, Leicester, Liverpool, *London*, Manchester, Newcastle, Nottingham, Paisley (Scot), Plymouth, Portsmouth, Sheffield, Southampton.

Entry requirements: Passport and visa.

Airlines: ABA, AOA (London), BOAC (London), KLM (London via Amsterdam), PAA (London), Air France, Irish Air Lines, Swiss Air, Sabena, Panair do Brasil. KLM (Prestwick, Scot); TCA (From Montreal, Canada, to Prestwick).

Steamships: To Avonmouth: Bristol City Line (Brit), Cunard-White Star (Brit), Fyffes (Brit). To Bristol: Bristol City Line. To Cardiff: Bristol City Line. To Glasgow: Anchor Line (Brit), Blue Star Line (Brit), Canadian Pacific (Brit), Cunard-White Star, Holland America Line (Dutch), Royal Mail Lines, Ltd. (Brit), Donaldson Line (Brit), Knutsen (Norweg). To Liverpool: Anchor Line, Blue Funnel (Brit), Blue Funnel-White Star (Brit), Booth (Amer), Canadian Pacific, Cunard-White Star, Donaldson, Elder Dempster (Brit), Ellerman (Brit), Furness (British), Henderson (Scot), Holland-America, Holland Steamship Co. (Dutch), Pacific Steam Navigation Co. (Brit), Royal Mail Lines, Ltd., United States Lines (Amer), Waterman (Amer), Lykes (Amer). To London: Blue Funnel, Blue Star, Canadian Pacific, Cunard-White Star, Elder Dempster, Ellerman Lines, Furness, Harrison (Brit), Holland America, Holland Steamship Co., Johnson Line (Swedish), New Zealand Steamship Co. (Brit), Orient Line (Brit), Pacific and Orient Steamship Line (Brit), Royal Mail Lines, Ltd., Union Castle (Brit), Waterman, Fjell Line (Norweg). To Newcastle: Calm-Thomson (Brit). To Plymouth: Cunard-White Star, Elder Dempster, Ellerman, Holland America, Johnson, Orient, Pacific Steam Navigation, Pacific and Orient Steamship Line, Channel Isle Steamship Co. (Brit). To Southampton: Aberdeen and Commonwealth Line (Brit), Canadian Pacific, Cunard-White Star, Holland America, Holland Steamship Co., Holland West Africa Line (Dutch), Nederland Royal Mail Line (Dutch), Orient, Rotterdam Lloyd (Dutch), Royal Mail Lines, Ltd., Shaw, Savill Line (Brit), Union Castle, United States Lines, French Line (French). To Hull: Wilson Line (Brit). To Manchester: United States Lines, Manchester Liners (Brit).

Hotels: Birmingham: Grand, Queen's. Cardiff: Park. Edinburgh: Braid, De Vere, Hills, North British, Roxburgh, Royal British. Glasgow: Adelphi, Beresford, Blythswood, Grosvenor, More's, North British. Liverpool: Adelphi, Exchange. London: Brown's, Connaught, Cumberland, Dorchester, Eccleston, Goring, Grosvenor House, Park Lane, Mayfair, Howard, Hyde

Park, Kingsley, Piccadilly, Regent Palace, Ritz, Royal Court, Savoy, Strand Palace, Tuscan, Waldorf. Manchester: Midland. Plymouth: Duke of Cornwall.

American Express Offices: Liverpool: India Bldg., Water Street. London: 6 Haymarket. Edinburgh: 1 Frederick Street. Glasgow: 115 Hope Street.

Shakespeare Drama Festival from end of March until September at Stratford-on-Avon, and Shakespeare's Birthday celebration April 23. The Grand National at Aintree in March. Oxford-Cambridge boat races at end of March or early April. Military Searchlight Tattoo at Aldershot in June. English Derby at Epsom Downs in June. Trooping the Colours in London, first week in June. Midsummer Eve bonfires on hill-tops at Cornwall, June 23. Festival of Light at Blackpool September-October. Cricket from May to September, rugby from October to April. Grouse shooting begins in August; partridge shooting in September. International Opera Season April to June. Royal Horse Show at Richmond in June. Special festivities mark St. Andrew's Day in Scotland November 30.

Estonia, Latvia, and Lithuania

Mild winters with the January mean temperature over 20. Summers are cool, with the July average under 65. Rain exceeds 20 inches yearly, with autumn the wettest season. Best traveling time: June to September.

Monetary unit: Same as the Union of Soviet Socialist Republics

Principal cities: Kaunas (Lith.), Riga (Lat.), Tallin (Est.).

Entry Requirements: Passport and visa (issued by Union of Soviet Socialist Republics).

Hotels: Kaunas: Metropolis.

Finland

Cold winters in southern section; extremely cold in central and northern areas, with some temperatures below zero even in the south. Summers mild in south, cool in north, with daytime temperatures in the 70's, occasionally higher. Light rainfall, with driest months February to June. Best traveling time: May to September.

Monetary unit: markka. Coins used: markka (200, 100, 20, 10, 5, 1); pennia (50, 25, 10, 5, 1). One markka equals 100 pennia.

Principal cities: Helsinki, Tampere.

Entry requirements: Passport and visa.

Steamships: To Helsinki: American Scantic Line (Amer), Swedish American Line (Swed), Lykes Line (Amer).

Hotels: Helsinki: Grand, Kamp, Torni, Societshuset.

The birthday of Johan Ludvig Runeberg

on February 5 honored with candle-burning in windows, outdoor ceremonies. Great midsummer festival on June 23 in villages.

France

Cold winters in eastern half of France with exception of Mediterranean coast, where weather is cool. Winters in western half of France also cool. In eastern portion, occasional winter temperatures are about zero and in western portion, about 20. Summers in southern France (south of imaginary line drawn between Biarritz and Geneva) are warm, and north of this line summer weather in general is mild. Throughout France, summer days are apt to reach 80's and 90's. Rainfall is light, with maximum rain in summer and fall. Climate is more humid in south than in north. Best traveling time: April to October in northern France; all year in southern France and Riviera.

Monetary unit: French franc. Coins used: franc (100, 20, 10, 5, 2, 1); centimes (50, 25, 20, 10, 5). One franc equals 100 centimes.

Principal cities: Amiens, Bordeaux, Boulogne, Brest, Calais, Cannes, Cherbourg, Clermont-Ferrand, Le Havre, Lille, Lyon, Marseille, Montpellier, Mulhouse, Nancy, Nantes, Nice, Nîmes, Paris, Reims, Rennes, Roubaix, Rouen, St. Etienne, Strasbourg, Toulon, Toulouse.

Entry requirements: Passport and visa.

Airlines: ABA, KLM (Paris via Amsterdam), PAA (Marseille), TWA (Paris), Air France (Paris), Norwegian Airlines, Sabena, Swiss Air Lines, Panair do Brasil.

Steamships: To Cherbourg: French Line (French). To Le Havre: United States Lines (Amer), Waterman (Amer), Interocean Line (Norweg). To Marseille: American Export Lines (Amer), American President Lines (Amer), French Line.

Hotels: Amiens: L'Univers. Biarritz: Le Fevre, St. Julien. Bordeaux: Terminus. Boulogne: Imperial, Splendide. Cherbourg: Du Casino, Du France. Deauville: Du Golf, Normandy (both open summer season only). Le Havre: Frascati. Lyon: Carlton. Grand. Marseille: Splendide, De Geneve. Nantes: Central. Nice: Angleterre, Negresco. Royal, Ruhl. Paris: Astra, Bristol, Chatham, Claridge's, Crillon, Edouard VII, Elysee Park, Franklin, George V, Grand, Louvre, Lutetia, Palais D'Orsay, Pont Royal, Reynolds, Ritz, Scribe, Terminus Est, Terminus Nord, Terminus St. Lazare, Triamon, France Choiseul, Vouillemont. Reims: Degermann, Du Lion D'Or. Strasbourg: Grand National, Maison Rouge, Terminus Gruber, Ville de Paris. Toulouse: Grand, Tivollier. Riviera: Cannes: Carlton, Grand, Martinez, Miramar, Royal. Juan-Les-Pins: Belles-Rives.

American Express Offices: Le Havre: Frascati Building, Marseille: 15 La Canebiere, Nice: 2 Rue du Congres. Paris: 11 Rue Scribe.

The Mardi Gras, held the Tuesday preceding Ash Wednesday, consists of parading, masquerades, boisterous hilarity, especially in southern France. Most picturesque carnival customs are in Nice. On May 24-25, devout persons make annual pilgrimage to the small Provencal village of Les Saintes-Marles-de-la-Mer, where prayers are held. On second day of festival, processions put to sea while games and exhibitions are held ashore. In Burgundy and Brittany, ancient pagan fire festival is observed June 23. Throughout France, the Night Watch, July 13, eve of the anniversary of the fall of the Bastille is celebrated with torchlight processions, festivities. July 14 is Bastille Day. Festival of St. Martin of Tours is held November 11. Grand Prix in Paris in June; Auto Show in October. Hunting season begins in September. International Film Festival at Cannes September-October, showing fifty best films produced during previous year in Europe, North and South America, with international movie stars present for awarding of prizes. Top Paris theater season is in November.

Germany and Austria

January temperatures average about 30, dropping at times to zero or below. In July temperatures average about 65, with days in the 70's, nights in the 50's. Light rainfall is distributed throughout the year, with most precipitation in summer. Best traveling time: May to September.

Principal cities: Aachen, Augsburg, Berlin, Bochum, Braunschweig, Bremen, Breslau, Charlottenburg, Chemnitz, Cologne, Dortmund, Dresden, Duisburg, Dusseldorf, Erfurt, Essen, Frankfurt, Gelsenkirchen, Gladbach, Graz (Aust.), Hagen, Halle, Hamborn, Hamburg, Hannover, Heidelberg, Hindenburg, Karlsruhe, Kassel, Kiel, Koblenz, Konigsberg, Krefeld, Leipzig, Linz (Aust.), Lubeck, Ludwigshafen, Magdeburg, Mainz, Mannheim, Mulheim, Munich, Munster, Nurnberg, Oberhausen, Pfullen, Saarbrucken, Solingen, Stettin, Stuttgart, Vienna (Aust.), Wiesbaden, Wuppertal, Wurzburg.

Entry requirements: U. S. State Department authorization.

Airlines: AOA (Berlin, Frankfurt-am-Main), PAA (Vienna).

Steamships: To Bremerhaven: United States Lines (Amer), Waterman (Amer).

Greece

In western Greece, winter temperatures average about 53, with summers at 80. Rainfall is light to moderate, with summer

the driest season. Winter temperatures in eastern Greece average about 48, with summers about 82, but the days from June to September frequently are in the 90's. Very light rainfall brings a dry and dusty summer. The winter averages about 42 in northeastern Greece; the summers, 80. In winter, occasional temperatures below freezing, with northeast winds bringin' snow. July and August are the hottest months throughout Greece, January the coldest. Best traveling time: April and May, September and October.

Monetary unit: drachma. Coins used: drachma (20, 10, 5, 2, 1); lepta (50, 20, 10). One drachma equals 100 lepta.

Principal cities: Athens, Kavalia, Patras, Piraeus, Salonika.

Entry requirements: Passport and visa.

Airlines: BOAC, TWA (Athens).

Steamships: To Piraeus: Greek Lines (Greek), American Export Lines (Amer), Isbrandtsen Line (Amer), Lykes Lines (Amer), United States and Levant Lines (Amer). To Salonika: American Export Lines, Lykes Lines.

Hotels: Athens: Acropolis, Grand, Grande Bretagne, D'Athens, King George, Minerva, New Angle-Terre, Splendid, Xenias Melathron.

American Express Office: Athens: No. 2 Constitution Square.

Numerous religious holidays, impressive Easter rites. In spring and fall marathon events are held in Panathenaic Stadium in Athens. In summer, symphony concerts and ancient Greek dramas are given in numerous open-air amphitheaters. June 23, bonfires are lighted on hilltops. In Salonika, October 26, St. Dimitrios Day is festival celebration. Resistance Day, October 28, commemorates Italian attack on Greece and is a national holiday.

Hungary

Cold winters and warm summers, with January temperatures averaging 25 at Budapest and summer temperatures 70. Rainfall is light with driest season from December to March. January is the coldest month, July the hottest. Best traveling time: May to September.

Monetary unit: forint. Coins used: forint; filler (50, 10, 5). One forint equals 100 fillers.

Principal cities: Budapest, Cluj, Debrecen, Szeged.

Entry requirements: Passport and visa.

Hotels: Budapest: Astoria, Britannia, Carlton, Dunapalota, Grand Hungaria.

The Day of St. Anna is celebrated July 26 among the well-to-do by "Anna Balls"; peasants hold folk dances, August 20 St.

Stephens Day, the greatest of Hungarian national festivals, is celebrated. Sporting events, special performances, native costumes are features of this holiday.

Iceland

Climate is fairly equable, with winter temperatures averaging in the low 30's and summer averages in the low 50's. Often misty and very windy, particularly in winter. Moderate rainfall, September being the month of heaviest rains and the rainy season lasts from September to January. Best traveling time: May to August.

Monetary unit: krona. Coins used: krona (10, 5, 2, 1); aura (25, 10, 5, 2). One krona equals 100 aurar.

Principal city: Reykjavik.

Entry requirements: Passport and visa.

Hotels: Reykjavik: Borg, Grandeur, Island, Vik.

Steamships: Iceland Steamship Co. (Icelandic).

Seaman's Day is celebrated the first Sunday in June with colorful processions, dances, rowing and swimming contests. National Holiday June 17 commemorates the establishment of Icelandic Republic in 1944.

Ireland—(See Northern Ireland)

Italy

Climatic conditions throughout Italy are marked by striking contrasts. Winters are extremely cold in Alpine region (northernmost Italy) and cold the length of the Apennines, with coldest districts in central and southern ranges. Summers in these regions cool or cold, with lowest temperatures in mountains of Basilicata and Calabria (southern Italy), where frosts occur in July and snow in September, lasting until April or May. The climate of the lowlands contrasts sharply with mountain regions. The great plain of northern Italy (south of Alps, north of Apennines) is cold in winter, warm in summer, some days in the 80's and 90's. The coastal strip south of the Ligurian Alps and areas along east and west coasts have cool winters (seldom below freezing) and warm summers, with frequent hot days. Temperatures in the lowlands become aggressively warm from north to south. Light rainfall in most regions, with rainy season varying in different areas. Best traveling time: April to November.

Monetary unit: lira. Coins used: lire (100, 50, 20, 10, 5, 2, 1); centesimi (50, 20, 10, 5). One lira equals 100 centesimi.

Principal cities: Bari, Bologna, Florence, Genoa, Leghorn, (Livorno), Messina, Milan, Naples, Palermo, Rome, Turin, Trieste, Venice, Verona.

Entry requirements: Passport and visa.

Airlines: TWA (Rome), ABA.

Steamships: To Genoa: Kerr Steamship Line (Brit), American Export Line (Amer), American President Lines (Amer), Lykes (Amer). To Naples: Kerr Steamship Line, American Export, American President Lines. To Palermo: American Export Line. To Rhodes: Greek Line (Greek).

Hotels: Florence: Baglioni, Berchiello, Excelsior-Italie, Grand, Majestic, Metropolitan, Roma, Savoy. Genoa: Bristol Palace, Colombia, Londres-Continental, Miramare, Savoy Majestic, Suisse. Milan: Cavour, Continental, Excelsior Gallia, Majestic-Diana, Principe-Savola, Touring. Naples: American, Continental, Londres, Royal are completely destroyed. Excelsior, Grand, Santa Lucia were severely damaged. Palermo: Excelsior, Grand des Palmes, Villa Ignea. Rome: Ambassador, Excelsior, Flora, Grand, Ludovisi, Quirinal, Savoy. Venice: Britannia, Europa, Grand, Royal Danieli, d'Italie Bauer-Grunwald.

American Express Offices: Florence: Via Tornabuoni 10. Milan: 41 Bis Via Manzoni. Naples: Piazza dei Martiri 23. Rome: Piazza di Spagna No. 38.

Throughout Italy, Carnival is held from January 17 to Ash Wednesday. St. Joseph's Day, March 19, a day of feasting, is widely observed. Modena, on April 30, celebrates the annual festival Maytime of the Maidens. Festival of the Palio in Siena, July 2, has picturesque horse race as chief event with medieval costumes, banners, processions. On July 16, Festival of the Madonna of Carmine is celebrated with dances, fireworks, revelry, particularly at Naples. Small villages celebrate Festival of the Immaculate Conception on December 8, the most elaborate ceremonials taking place at Bagnoli Irpino. In the Tyrrhenian Sea, approximately 150 miles across from Rome, lies the island of Corsica, whose capital, Ajaccio, is Napoleon's birthplace. Seven miles south of Corsica is the Italian island of Sardinia, whose capital is Cagliari. Just off Italy's southern extremity is the island of Sicily, whose chief cities are Catania, Girgenti, Messina, and Palermo. In east central Italy, south of Rimini, is the independent republic of SAN MARINO whose capital, San Marino, has a population of 2000.

Latvia—(See Estonia)

Liechtenstein

Winters are cold, with extremely cold temperatures in higher altitudes. Mild summers in lowlands, cooler in higher ranges. Moderate to heavy rainfall. January is the coldest month, July the warmest. Best traveling time: May to September.

Monetary unit: franc. Swiss currency is used.

Principal city: Vaduz.

Entry requirements: Passport and visa (issued by Swiss Consulate).

Only railway in Liechtenstein is at Schaan, 3 miles from Vaduz. The one hotel in Vaduz is the Wald.

Lithuania—(See Estonia)

Luxembourg

Cold winters, mild summers, with some summer days warm or hot and some winter weather below 20. Light rainfall, mainly from May to October. Best traveling time: May to September.

Monetary unit: Although Luxembourg has its own currency at the rate of one Luxembourg franc to 1.25 Belgian francs, Belgian currency is extensively used.

Principal city: Luxembourg.

Entry requirements: Passport and visa.

Hotel: Luxembourg: Grand Brasseur.

Monaco

Cool winters, warm summers, with frequent hot summer days and moderate annual rainfall. Best traveling time: September to May.

Monetary unit: franc. Coins used: franc (100, 2, 1); centime (50). One franc equals 100 centimes. French currency is used extensively.

Principal cities: Monaco, Monte Carlo.

Entry requirements: Passport and French visa, then Monacoan visa.

Hotels: Monaco, Monte Carlo: D'Albion, Des Palmiers, De Paris, Hermitage, Metropole, Monte Carlo Palace, New Beach.

The gambling casino at Monte Carlo is internationally famous and the peak season is the winter.

The Netherlands

Cold winters and mild summers, with summer days sometimes in the 80's and winter temperatures seldom below 20. Light rainfall, the late summer and fall being the rainiest season. Climate is warmer along the coast than inland. Best traveling time: May to September.

Monetary unit: florin (or guilder). Coins used: florin (2½, 1); cent (50, 25, 10, 5, 2½, 1). One florin (or guilder) equals 100 cents.

Principal cities: Amsterdam, Rotterdam, The Hague.

Entry requirements: Passport and visa.

Airlines: ABA, AOA (Amsterdam), DDL, KLM (Amsterdam), Air France (Amsterdam via Paris), Swiss Air.

Steamships: To Rotterdam: Holland America (Dutch), Lykes Lines (Amer), United States Lines (Amer), Waterman (Amer), Black Diamond (Amer), South Atlantic Steamship Co. (Amer), Fjell Line

(Norweg), Interocean Line (Norweg), Isbrandtsen Co. (Amer), Oranje Line (Dutch).

Hotels: Amsterdam: Amstel, Centraal, Doelen, Krasnapolsky, Pays-Bas, Roode Leeuw, Park. Rotterdam: Hotels Weimar, Coomans, Zuid-Hollandsch, Mass destroyed. Hotels Atlanta, Park, Regina and Royal limited. The Hague: du Passage, Grand Hotel Central, Terminus.

American Express Offices: Amsterdam: Warmoesstraat 197/199 Damsquare. Rotterdam: 120 Meent. Enschede: Markt 5. The Hague: Plaats 31.

At fishing village of Marken on the Zuider Zee, natives dress on Sundays in costumes. Birthday of Princess Juliana, celebrated April 30.

Northern Ireland and Eire

Cool winters (average about 42) with some cold weather, especially in Northern Ireland, with January the coldest month. Summers cool (average about 58), some days mild or warm, with July and August warmest months. Light rainfall in eastern sections, moderate in west, with most rain in late summer to midwinter. Best traveling time: May to September.

Monetary unit: In Northern Ireland, British pound; in Eire, the Irish pound (also called the Saorstat pound). Coins used in Eire: half crown (2½ shillings); florin (2 shillings); shilling; penny (6, 3, 1, ½), farthing. One Irish pound equals 20 shillings; one shilling equals 12 pence; One penny equals 4 farthings.

Principal cities: Belfast, Cork (Eire), Dublin (Eire), Londonderry, Limerick (Eire).

Entry requirements: Passport and visa. (Visa for Northern Ireland issued by British Consul).

Airlines: AOA (Shannon, Eire), PAA (Shannon), TWA (Shannon), Irish Air Lines.

Steamships: To Belfast: Anchor Line (Brit), Canadian Pacific (Brit), Cunard-White Star Line (Brit). To Cobh: Cunard-White Star, United States Lines (Amer). To Dublin: Blue Star Line (Brit), Cunard-White Star, Irish Shipping, Ltd. (Irish), United States Lines. To Londonderry: Anchor Line.

Hotels: Belfast: Eglinton and Winton, Grand Central, Imperial, Midland Station, Royal Avenue. Dublin: Central, Gresham, Jury's, Royal Hibernian, Shelbourne.

In Northern Ireland is the Giant's Causeway, strange rock forest of 40,000 pillars still inexplicable to geologists. Near Belfast is Lough Neagh, largest lake in British Isles. In Eire, the "Feis Ceoil" (Music Festival) is held in May. The Dublin Horse Show is held in August and the Puck Fair at Killorglin is held the same month.

Norway

Cold winters averaging in the 20's, more moderate along coast than inland (Bergen's coldest day: 5; Oslo's: -26). Coldest months February. Summers are cool, warmest in southeastern section (July average in Oslo: 60). Summer days are sometimes in the 70's. Gales are frequent on the west coast, three to four per month in winter, with December and January the stormiest; two to three per month in summer. There is much snow in northern Norway, sometimes even in the summer. Extremely heavy rainfall on coast near Bergen, light rainfall inland. The heaviest rains occur from September to January. Long summer days; no real darkness even in southern Norway from late April until mid-August. Best traveling time: May to September.

Monetary unit: krone. Coins used: krone; ore (50, 25, 10, 5, 2, 1). One krone equals 100 ore.

Principal cities: Bergen, Oslo, Stavanger, Trondheim.

Entry requirements: Passport and visa.

Airlines: ABA, AOA (Oslo), BOAC (Oslo via London), Scandinaur (Oslo), Norwegian Air Lines.

Steamships: To Oslo: American Scantic (Amer), Scandinavian American (Danish), Norwegian American Line (Norweg), United States Lines (Amer).

Hotels: Bergen: Bristol, Norge, Terminus. Oslo: Continental, Grand, Bristol.

St. John's Eve, June 23, is celebrated with festivities, bonfires, and folk dances. International regatta at Hankoe during summer. National winter sports events near Oslo in February. Easter is a five-day national holiday; most people going to mountains for best skiing, sledding; outdoor church services. The last weeks in May, the return of the whaling fleet is celebrated in Norwegian whaling centers of Sandefjord, Tonsberg, and Larvik with pageants, dances, festivities. Sun festivals are held in northern Norway when sun first appears after winter darkness. Valley villages farther south, such as Rjukan, Odda, and Høyanger hold special celebrations at these times.

Poland

Winters are cold, with December, January, and February averages at Warsaw about 25 or 28 and some days below zero. Summers are mild, averaging about 65, with daytime temperatures in the 70's, sometimes higher. Light rainfall, with May to October heaviest season. Best traveling time: May to October.

Monetary unit: zloty. Coins used: zloty (10, 5, 2, 1); grosz (50, 20, 10, 5, 2, 1). One zloty equals 100 groszy.

Principal cities: Bialystok, Bromberg,

Czestochowa, Gdynia, Katowice, Krakow, Lodz, Lublin, Lwow, Posen, Sosnowiec, Warsaw, Wilno.

Entry requirements: Passport and visa.

Airlines: ABA.

Steamships: To Gdynia: American Scantic Line (Amer), Scandinavian American Line (Danish).

Hotels: Warsaw: Bristol, Europejski, Polonia Palace.

Religious pilgrimages to Czestochowa reach a peak on July 16, the Feast of Our Lady of the Scapular, and the festival ends August 15 with the Feast of the Assumption of our Blessed Lady.

Portugal

Climate is equable and temperate, with average winter temperatures in the 50's, summers in the 70's or 80's, and the daily variation never exceeding 23 degrees. Deep valleys, sheltered from cool winds, are excessively hot in summer. In mountains, temperature declines with increasing altitudes. Rainfall light in the south, moderate in the north. Heavy fogs are common along the coast. Best traveling time: May to September.

Monetary unit: escudo. Coins used: escudo (10, 5, 2½, 1); centavo (50, 20, 10, 5). One escudo equals 100 centavos.

Principal cities: Barcelos, Braga, Coimbra, Guimaraes, Leiria, Lisbon, Porto, Vizeu.

Entry requirements: Passport and visa.

Airlines: ABA, BOAC (Lisbon), KLM, PAA (Lisbon), TWA (Lisbon), British South American Airways, Ltd., Panair do Brasil, Swiss Air.

Steamships: To Lisbon: American Export Line (Amer), Blue Star Line (Brit), Booth Line (Brit), Royal Mail Lines (Brit), Spanish Line (Spanish), Wilhelmsen Line (Norweg), Yeoward Line (Brit), Elwell Line (Amer), Flomarcy Co. (Port).

Hotels: Lisbon: Avenida Palace, Aviz Victoria.

For three days preceding Ash Wednesday, Carnival is held amid much festivity.

Rumania

Winters are cold (January average in Bucharest is 26°) with occasional below-zero weather. Summers are warm with daytime temperatures in the 80's, and sometimes 90's. Coldest month is January; warmest, July. Light rainfall, early summer being the wettest season. Best traveling time: May to September.

Monetary unit: leu (plural: lei). Coins used: leu (250, 200, 100, 50, 20, 10, 5, 2, 1); bani (50, 25). One leu equals 100 bani.

Principal cities: Bucharest, Galati, Iasi.

Entry requirements: Passport and visa.

Hotels: Bucharest: Athnee Palace, du Boulevard, Splendid Park, Stanesco.

Easter is celebrated for three days.

Scotland—(See England)

Spain

Average winter temperatures in most areas of Spain are in the 40's and, in the southern section, the 50's. Summers are coolest in the north and northwest (in the 60's), average temperatures in other areas being in the 70's or, in southern Spain, the 80's. The winter season lasts nine months in higher elevations of the interior and is as short as two months in the lowlands. In the south there is practically no winter season. Rainfall is light to moderate in the north and northwest and fairly well distributed throughout the year; very light in other areas, resulting in arid sections in the south and southeast. Best traveling time: May to September.

Monetary unit: peseta. Coins used: peseta (25, 20, 10, 5, 2, 1); centimo (50, 25, 20, 10, 5, 2, 1). One peseta equals 100 centimos.

Principal cities: Albacete, Alicante, Almeria, Barcelona, Bilbao, Burgos, Cadiz, Cordoba, Gijon, Granada, Jerez de la Frontera, La Coruna, La Linea, Lorca, Madrid, Malaga, Murcia, Palma, Salamanca, Santander, Seville, Valencia, Valladolid, Zaragoza, San Sebastian (resort town).

Entry requirements: Passport and visa. All communications concerning visa authorization must be paid for by applicant if traveler intends remaining more than seven days. Supply names and addresses of two persons in Spain if intending to be in country more than one week.

Airlines: KLM, TWA (Madrid).

Steamships: To Barcelona: American Export Lines (Amer), Gardiaz Lines (Span), Kerr Steamship Co. (Brit). To Bilbao: Kerr Steamship Co., Spanish Line (Span). To Cadiz: Gardiaz Lines, Kerr Steamship Co., Spanish Line. To Coruna: Spanish Line. To Gijon: Kerr Steamship Co. To Seville: Kerr Steamship Co., Spanish Line.

Hotels: Barcelona: Continental, Majestic, Oriente, Principe, Ritz. Bilbao: Carlton. Granada: Alhambra Palace. Madrid: Felipe II, Londres, Nacional, Nueva York, Palace, Paris, Ritz, Victoria. Malaga: Miramar, Niza. Palma: Alhambra, Formentor, Mediterraneo. San Sebastian: Arana, Biarritz, Continental Palace, De Londres, Maria Cristina, Principe. Seville: Andalucia Palace, Madrid. Valencia: Alhambra, Imperio, Metropol, Regina.

For three days, preceding Ash Wednesday, the Carnival holds full sway. The Thursday after Trinity Sunday, Corpus Christi is celebrated with magnificent

pageantry and the processions, with candles, flowers, and banners, make it one of the most impressive religious events of the year. St. John's Eve, June 23, is traditionally observed with bonfires, particularly in villages. From Easter Sunday on, bull fights are held in all important towns, the best being in spring and autumn at Madrid, Seville (during festivities), Salamanca (during festivities), Valencia, and Saragossa. In the summer, bull fights at San Sebastian and Bilbao are outstanding. In Seville, the Burial of the Sardine is carried out on Ash Wednesday with ceremonial pomp. In Madrid, the Day of St. Anthony, January 17, horses and animals are dressed in flowers and ribbons, driven to Church of San Antonio while bystanders watch the procession. For the Burial of the Sardine, throngs go to the banks of the Manzanares River for the ceremony. The Day of St. Isidore the Ploughman is celebrated on May 15 in Madrid with tapestries on balconies, banners, music, and *pelota* games. In Valencia, the Feast of St. Joseph is celebrated on March 19 with much splendor.

Sweden

With its northern extremity in the Arctic Circle, Sweden's winters are cold in the south and extremely cold in the north. Temperatures in the north drop to -45° , and are often below zero throughout the country. Summers are mild in the south, cool in the north, with some summer days reaching the 70's or 80's. February is the coldest month, July the warmest. The summers are short, the ice breaking up in May or June and re-forming in October. The rainfall is light, with the rainy season in late summer. The sun is continuously above the horizon in the northern part of the country from the end of May until mid-July. Best traveling time: May to August.

Monetary unit: krona. Coins used: krona (20, 10, 5, 2, 1); ore (50, 25, 10, 5, 2, 1). One krona equals 100 ore.

Principal cities: Gothenburg, Malmo, Stockholm.

Entry requirements: Passport and visa.

Airlines: ABA, AOA (Stockholm), BOAC (Stockholm via London), DDL, KLM (Stockholm, Malmo via Amsterdam), Sabena, Scandinavian (Stockholm), Air France (Stockholm via Paris), Royal Norwegian Airlines, Swiss Air.

Steamships: To Gothenburg: American Scantic (Amer), Swedish American (Swed), Johnson Line (Swed), Lykes Line (Amer). To Malmo: Same except for Lykes. To Stockholm: Same as Gothenburg.

Hotels: Gothenburg: Grand Haglund, Eggers. Malmo: Savoy. Stockholm: Carlton, Continental, Gillet, Grand Royal.

American Express Office: Stockholm: 11 Smalandsgatan.

April 30, the Feast of St. Walpurgis symbolizes the end of winter, and students in old university centers such as Stockholm, Upsala, and Lund celebrate. In the evening, bonfires are lighted and folk dancing begins in village squares, the merrymaking continuing until May 1, a holiday. June 6 is Swedish Flag Day, with patriotic rallies in the Stockholm stadium, where the King presents flags to various organizations. On June 23, lightest day of the year, most towns and villages erect garland-decked poles and carry on festivities late into the night. December 13 is St. Lucia's Day, marking the beginning of the Christmas season. Local governments sponsor night pageants through the streets, followed by charity balls.

Switzerland

Wide variations in temperature and rainfall due to differences in elevation. Winter temperatures in high altitudes average about 15 to 20, with some below-zero weather. In lower altitudes, temperatures average about 30. Summer temperatures in high altitudes average 45 to 55; in lowlands about 65 with warm, sometimes hot, days. In the highest elevations (St. Theodale Pass, 10,899 feet) winter conditions are practically continuous throughout the year. In the lower regions (Lago Maggiore, for example) winter lasts only three months. January is the coldest month. The variation in rainfall (light in Basle, Berne; extremely heavy at Santis) is largely determined by mountainous conformation. The greatest rainfall occurs between April and October, yet this is the best traveling time because it is warmest.

Monetary unit: Swiss franc. Coins used, franc (100, 20, 10, 5, 2, 1); centime (50, 20, 10, 5, 2, 1, ½).

Principal cities: Basle, Berne, Geneva, Interlaken, Lausanne, Lucerne, St. Gallens, St. Moritz, Zurich.

Entry requirements: Passport and visa.

Airlines: ABA, KLM (Zurich, Geneva via Amsterdam), TWA (Geneva), Air France (Zurich, Geneva via Paris), Czech Air Lines, Swiss Air Lines.

Hotels: Basle: Central, Euler, Hefer, Three Kings, Vegt, Victoria. Berne: Baren, Bellevue-Palace, Bristol, Schweitzerhof. Geneva: Beau Rivage, Cornavin, De Russie, Des Bergues, La Residence, Richmond. Interlaken: du Lac, Interlaken-Interlaknerhof, Jura. Lausanne: Lausanna-Palace, Beau-Rivage, Central. Lucerne: des Balances, Grand National, Monopole, Montana, Schweizerhof Wildennann. St. Gallens: Hecht, Walhalla-Terminus. St. Moritz: Neues Post Hotel. Zurich: Baur au Lac, Central, Dolder Grand, Eden au Lac, Savoy.

American Express Offices: Basle: Markt-gasse 5. Geneva: 7 Rue du Mont Blanc. Lucerne: Schweizerhofqual 4. Zurich: Sihlporteplatz 3.

Independence Day, August 1, is celebrated with fireworks and festivities nationally. All other holidays, of which there are many, are celebrated locally, even such days as Good Friday. All cantons hold a Carnival some time before Lent. Near Lucerne, on the Friday after Ascension, the people of Uri make a pilgrimage to William Tell's shrine at near-by Tellsplatte, on Lake Lucerne's southern shore. In Zurich, the Six O'Clock Ringing Feast, a picturesque festival during April, celebrates the end of winter. In October, at Thun, an annual shooting festival is conducted in medieval costumes. In some cantons, Christmas begins on December 6. Skiing, sledding, winter sports commence December 25. Swiss Industries Fair at Basle in May. Summer ski meet on the Jungfrauoch.

Wales—(See England)

Union of Soviet Socialist Republics

The northern tundra has cold winters, cool summers with an average July temperature of less than 56. Although the surface thaws for a month or two in summer, the ground below remains permanently frozen. Precipitation is low, but the air is damp and raw. The extensive belt south of this area, and central Russia generally, has much winter snow and no season is without precipitation. The temperature is rarely above freezing in winter, the summer average in July being 50. In east Russia and western Siberia winters are extremely cold, with a January average of 10 in the west and —15° in the east. West of the Urals rainfall is 20 inches annually, only 8 to 16 inches in the east; the northern section has less rain than the south.

Moscow has an average daily high of 71 during July, the warmest month, and during January, coldest month, the average daily high is about 14, with 5 as the average daily low. Central Siberia has the worst winters in the world. On Russia's northeast coasts the summers are damp, cloudy, and cool, with fog and drizzle. The winters are warmer than inland, but there are constant northwest winds. The Amur basin has heavy summer rain, and the winters are less agreeable than the far interior of Siberia owing to the strong, cutting winds. In the steppes the rain is light, the summers dry and hot, most rain falling during spring and early summer. Toward the southeast, annual rainfall is less than 8 inches. The winters are cold for this latitude with average temperatures below freezing except in the far south. The summers are hot with the July average

about 80°. Southern Crimea has mild, rainy winters and hot summers; winter temperatures, as an average, above freezing. Along the eastern shores of the Black Sea the rain is excessive all year. The Caucasian area is typical of mountainous regions and south of here the winters are severe, the summers hot. Best traveling time: May to September.

Monetary unit: Gold chervonetz. Coins used: rouble; kopecks (50, 20, 15, 10, 5, 3, 2, 1). One rouble equals 100 kopecks.

Principal cities: Archangel, Astrakhan, Baku, Cernauti, Chisinau, Chkalovsk, Dnepropetrovsk, Gomel, Gorki, Gorlovka, Grozni, Izhevsk, Ivanovo, Kalin, Kazan, Kerch, Kharkov, Kiev, Kirov, Kostroma, Krasnodar, Krivoirog, Kuibyshev (Samara), Kursk, Leningrad, Magnitogorsk, Makeevka, Mariupol, Minsk, Moscow, Murmansk, Nikolaev, Nizhni Tagil, Odessa, Ordzhonikidze, Orel, Penza, Poltava, Rostov, Rybinsk, Saratov, Sevastopol, Shakhty, Simferopol, Smolensk, Stalin, Stalingrad, Taganrog, Tambov, Tiflis, Tula, Ufa, Ulyanovsk, Vitebsk, Voronezh, Voroshilovgrad, Yaroslavl, Yerevan, Zaporozhe.

Entry requirements: Passport and visa.

Steamships: To Leningrad: American

Scantic Line (Amer). To Odessa: American Export Lines (Amer).

Yugoslavia

Along the coast, winters are mild (January average at Ragusa, 48°) but subject to a cold dry wind from the mountains. Inland temperatures are colder, averaging about 30° in Belgrade and Skopje (Uskub) and extremely cold in higher elevations. Summer temperatures average in the 70's, with frequent daytime averages of 80°. It is warmer along the coast than inland. Rainfall is moderate on coast, light inland, with heaviest rains from October to January. The coldest month is January; warmest, July. Best traveling time: May to September.

Monetary unit: dinar. Coins used: dinar (50, 20, 10, 2, 1); para (50, 25). One dinar equals 100 paras.

Principal cities: Belgrade, Subotica, Zagreb.

Entry requirements: Passport and visa.

Hotels: Belegarde: Bristol, Roi Serbe. Zagreb: Esplanade, Palace.

Throughout Serbia on June 28 special church services, parades, and athletic carnivals celebrate St. Vitus Day.

AFRICA

Algeria

Along the coast winters are cool, summers warm, with Algiers averaging 55° in January, 77° in July and some temperatures in the 90's, but prevailing northeast winds prevent excessive heat. Light rainfall with most from October to March. On the Shotts plateau, winters are colder with frequent freezing temperatures and severe snowstorms; summer days hot (in the 80's or 90's) and nights about 35° cooler; very light rainfall. In the Sahara region: extremely dry air, never more than 5 inches of rain, in some places none, with January average temperatures as low as 54° at In-Salah, 47° at Ghardaia; summer averages in the 90's. Dust storms are severe and at times make travel impossible. The daily temperature range is about 35°. Best traveling time: October to May.

Monetary unit: French currency.

Principal cities: Algiers, Constantine, Oran.

Entry requirements: Passport, visa (by French consular officer), yellow fever inoculation certificate, five photographs.

Airlines: Air France, Sabena, TWA (Algiers).

Steamships: To Algiers: American Export Lines (Amer), French Line (French), Lykes Lines (Amer), Norton, Lilly Co. (Brit), United States and Levant Line (Amer). To

Oran: American Export Lines, Lykes Lines.

Hotels: Algiers: Albert, Aletti, St. George. Constantine: Cirta, Trans-Atlantique. Oran: Grand.

Mohammed's birthday, termination of the Ramadan Fast and the pilgrimage to Mecca are celebrated respectively February 2, August 17 and October 24 in 1947 and approximately eleven days earlier each succeeding year. During these days family feasting, gay clothing and exchange of gifts are the main features as well as native sports, horsemanship and arms feats. Good Moslems kneel and bow to the ground in prayer five times a day no matter where they happen to be when prayer time arrives and at these times the tourist should neither stare nor take photographs. Travelers should not enter a mosque unless assured it is open to visitors. If invited to a Mohammedan home, eating should be done with the right hand only. Eat sparingly, as the remainder is for the women and children. Coffee or tea, if offered, may be refused but once accepted then the drinking of two or possibly three cups is expected but under no circumstances should a fourth cup be accepted as the third is usually (and the fourth is always) a polite signal to leave. The Moslem day of rest is Friday and most business places are closed. If the traveler intends remaining in a predominantly Mohammedan country for any length of time, it is advisable

to learn through American Express Company representatives, hotel clerks or transportation officials of various local customs and national habits in more complete detail. Throughout the African continent, on a whole, Christian holidays are observed as in Europe and America but with less pageantry.

Angola

At Luanda, daytime temperatures average in the low 80's from November to May; in the high 70's from June to October, with an 8 or 10° drop at night. Rainfall is moderate inland (50 to 60 inches annually) from September to April with a dry spell in January. On the coast, light rain falls mainly from February to April. The Antarctic current cools the coast but causes frequent mists and clouds. Best traveling time: June to October.

Monetary unit: angolar. Coins used: angolar (10, 5, 2½, 1); centavo (50, 20, 10, 5, 2, 1, ½). One angolar equals 100 centavos.

Principal cities: Lobito, *Luanda*, Nova Lisboa.

Entry requirements: Passport, visa (issued by Portuguese consul), smallpox vaccination, typhoid, paratyphoid, yellow fever and typhus inoculation certificates.

Airlines: South African Airways.

Steamships: To Lobito: American West African Line (Norweg), Union Castle (Brit). To Luanda: American West African Line.

Hotels: Lobito: Internacional, Terminus. Luanda: Areas, Central.

Portuguese holidays celebrated are Discovery of Brazil, May 3, Cameos Day, June 10 and Independence Day, December 1. National holiday is celebrated October 4 with carnival-parade and native dances. For Mohammedan holiday information see last paragraph under Algeria.

Anglo-Egyptian Sudan

Summer average temperatures are around 90 with May, June, July the warmest months. January averages are about 70 or 80° (60° at Wadi Halfa in the north). Rainfall ranges from almost none to light, with greatest rain from May to September. During dry season there are severe dust storms. Best traveling time: September to May.

Monetary unit: gold pound. Coins used: pound (1, ½); piastre (20, 10, 5, 2); millième (10, 5, 2, 1, ½). One pound equals 100 piastres; one piastre equals 10 millièmes.

Principal cities: *Khartoum*, Port Sudan.

Entry requirements: Passport and visa (by British consular officer). If originating or having passed through any of the following countries, must be in possession of

yellow fever certificate dated no less than fourteen days or more than two years prior to entry in Sudan: Angola, Belgian Congo, Cameroons, Ethiopia, French Equatorial Africa, French Guinea, French West Africa, Gold Coast, Liberia, Nigeria, Sierra Leone, Uganda.

Airlines: BOAC, Air France.

Steamships: To Port Sudan: Cunard-White Star (Brit), Ellerman, City & Hall (Brit), Henderson Line (Brit), Holland African Line (Dutch), Isthmian Line (Amer), Union Castle (Brit).

Hotels: Khartoum: Gordon, Grand.

British national holidays are observed. For Mohammedan holiday information see last paragraph under Algeria.

Basutoland and Swaziland

Basutoland has extremes of heat and cold, both seasonal and diurnal, with maximum temperature on record 93, minimum 11. The air is dry and bracing; rainfall is heaviest during summer. In Swaziland, the average January temperatures are in the 80's, with July in the 60's. The daily range is about 20° and the inland elevations are cooler. Rainfall is moderate with most in summer months and thunderstorms are frequent. Best traveling time in both protectorates: April to October.

Monetary unit: Same as Union of South Africa.

Principal cities: *Maseru*, (Basuto), *Mbabane* (Swazi).

Entry requirements: Same as Union of South Africa.

Hotels: Maseru: Stephen's. Mbabane: Tavern.

Except for Dingaan's Day, Basutoland observes the same holidays as the Union of South Africa. In addition, Moshoeshoe's Day, March 12, is celebrated in commemoration of recognition of Basutos as British subjects. Swaziland celebrates Union of South Africa holidays but does not observe Union Day. Descended from the Zulus, native Swazis consider themselves superior to Basutos.

Bechuanaland

Hot and dry with 18 to 25 inches of annual rainfall during December to the end of April. The area consists mostly of the Kalahari Desert. Best traveling time: May to August.

Monetary unit: Same as Union of South Africa.

Principal city: *Serowe*.

Entry requirements: Same as Union of South Africa.

There is no hotel at Serowe, probably the largest native town in South Africa and headquarters of the Ba-mangweto tribe, but accommodations may be had at

boarding houses. Licensed hunting is good at the Kgalagadi District game reserve (3,750 square miles) and closed season is from 1 September to last day in February. Holidays celebrated are the same as the Union of South Africa except for Dingaan's Day and Union Day.

Belgian Congo

Afternoon temperatures range about 85 or 90, with the nights 70 or 75. Humidity is high, fogs are frequent, as well as heavy dews. February and March are the warmest months, August the coolest, and there is about 10° variation in average temperatures throughout the year. Rainfall is moderate to heavy with November to April the wettest months. Best traveling time: May to October.

Monetary unit: Congolese franc. Coins used: Belgian.

Principal cities: Coquilhatville, Elizabethville, Leopoldville, Stanleyville.

Entry requirements: Passport, visa (issued by Belgian consul), health certificate, smallpox vaccination certificate, yellow fever inoculation certificate, police certificate. Authorization communication must be obtained, applicant paying expense. Travelers must possess round-trip tickets or transportation to country beyond which will grant entry or else deposit approximately \$380 in U. S. currency.

Airlines: BOAC, PAA (Leopoldville), Sabena, Air France.

Steamships: To Matadi: American West African Line (Norweg).

Hotels: Elizabethville: Bruxelles, Grand, Metropole. Leopoldville: A B C Hotel. Matadi: Compagnie Francaise du Bas-Congo, Roma.

In all administrative centers Kermis or native folk dances and sport contests are held July 1. At Stanleyville, July 1, natives run river races in huge canoes. Independence Day, July 18, is celebrated. July 21, in provincial capitals, the Te Deum Review is given with student and other parades, vegetable and flower shows and displays of native arts and crafts. International soccer matches are held July 21 at Leopoldville and Elizabethville. On October 4, natives originating from Portuguese colonies celebrate the Portuguese national holiday in Leopoldville and elsewhere in the Lower Congo.

British and French Somaliland

Arid and nearly always hot, frequently oppressive, in all months of the year. The average temperature at Berbera is 77 in January, 98 in July. Rainfall is very light and fogs are frequent in the summer along the coast. Best traveling time: November to March.

Monetary unit: British and French currency.

Principal cities: Berbera (Brit. Somal.), Djibouti (Fr. Somal.).

Entry requirements: Passport, visa (issued by British or French consul, depending on area visited), smallpox vaccination certificate. If passing through West Africa, Belgian Congo or Lower Sudan, possession of yellow fever inoculation certificate dated not less than fourteen days or more than two years prior to departure.

Airlines: Air France (in French Somaliland).

Hotels: Djibouti: Continental, des Arcades.

British and French national holidays are observed. For Mohammedan holiday information see last paragraph under Algeria.

Egypt

Winters are cool along the coast, mild inland. Summers are hot and about 10° warmer inland than near the coast. In Cairo, January averages are 55 compared to 62 at Assuan. During July, temperature averages are 83 at Cairo, 93 at Assuan. The average summer day in Cairo is in the 90's but the nights are about 25° cooler. Rainfall is light, some parts receiving almost none. Best traveling time: November to May.

Monetary unit: Egyptian pound. Coins used: plaster (20, 5, 2); millièmes (10, 5, 2, 1, ½). One pound equals 100 piasters; one plaster equals 10 millièmes.

Principal cities: Alexandria, Assuan, Cairo, Luxor, Port Said, Suez.

Entry requirements: Passport, visa. If from Bagdad, smallpox vaccination certificate dated not less than 21 days or more than two years prior to arrival in Egypt. Possession of yellow fever inoculation certificate dated not less than 14 days or more than two years prior to entry into Egypt if having passed through the following countries: Angola, Anglo Egyptian Sudan (south of Khartoum), Belgian Congo, Cameroons, Ethiopia, French Equatorial Africa, French Guinea, French West Africa, Gambia, Gold Coast, Liberia, Nigeria, Sierra Leone, Uganda.

Airlines: BOAC, KLM, TWA (Cairo), Air France.

Steamships: To Alexandria: American Export Lines (Amer), American President Lines (Amer), Barber SS Line (Amer), Fern Line (Norweg), Ellerman, Westcott and Laurence (Brit), Isthmian Lines (Amer), Kerr Line (Brit), Prince Line (Brit). To Port Said: American President Lines, Blue Funnel Lines (Brit), Ellerman, City & Hall (Brit), Henderson (Brit), Holland Lines (Dutch), Isthmian, Kerr, Orient Line (Brit), Prince Line, Union Castle

Brit), Wilhelmsen (Norweg). To Suez: American President Lines, Anchor Line (Brit), Holland Lines, Isthmian, Orient Line, Union Castle.

Hotels: Alexandria: Cecil, Windsor. Assuan: Cataract, Grand. Cairo: Carlton, Continental-Savoy, Mena House, Metropolitan, National, Shepheard's. Luxor: Luxor, Winter Palace (open from December 15 to March 31 only). Port Said: Casino Palace, Eastern Exchange. Suez: Bel Air. **American Express Office:** Cairo: 47 Sh. Talika Farida.

For Mohammedan holiday information see last paragraph under Algeria.

Ethiopia (Abyssinia)

Moderate plateau climate in higher elevations, warmer in lower areas, with moderate rainfall (about 50 inches), most of which falls from June to September, November to February being the driest season. At Addis Ababa the average monthly temperatures range from 59 in December to 66 in May, while at Gambela (lower elevation) the range is between 80 and 85°. Best traveling time: December to May.

Monetary unit: Ethiopian dollar. Coins used: dollar; cent (50, 25, 10, 5, 1). One dollar equals 100 cents.

Principal cities: Addis Ababa, Asmara.

Entry requirements: Passport and visa issued by British consul).

Airlines: BOAC, Air France.

Hotels: Addis Ababa: Bolulakos, de France, Imperial.

For Mohammedan holiday information see last paragraph under Algeria.

French Equatorial Africa

Hot and humid with average temperatures usually about 80, higher in the Sahara region in the north. Rainfall along the coast is extremely heavy, moderate to heavy in central sections and light in the north. The dry season is June to September in the south, October to April in the north. In the south the wettest months are March, April, October and November. Best traveling time: December to May.

Monetary unit: French currency.

Principal cities: Brazzaville, Duala, Yaounda.

Entry requirements: Passport, visa, yellow fever inoculation certificate, five photographs.

Airlines: PAA (Leopoldville, Belgian Congo, which is on the Congo River directly across from Brazzaville), Air France, Sabena.

Steamships: To Duala: Barber Line (Brit), Elder Dempster Line (Brit), Holland-West Africa (Dutch).

Hotels: Brazzaville: Boarding house accommodations only. Duala: A B C Hotel, Poste.

French national holidays are observed.

For Mohammedan holiday information see last paragraph under Algeria.

French West Africa

The west coast area has an average winter temperature of 70, the summer averages 82, with 20° variation daily. Rainfall is very light. In the interior, winter temperatures average about 75, summers 85 to 90 or higher and rainfall ranges from almost none in the northern desert region to 40 inches in the southern section. Along the south coast, humidity is excessive and in the dry season, November and December, the monthly temperatures average in the 70's or 80's. During the wet season, from April to November, the temperatures are in the 80's with March to May the hottest months. Rainfall is extremely heavy along parts of the coast, decreasing progressively northward. Best traveling time: November to February.

Monetary unit: French currency.

Principal city: Dakar.

Entry requirements: Passport, visa (French consular officer), yellow fever certificate, five photographs.

Airlines: PAA (Dakar), Air France, Sabena.

Steamships: To Dakar: American West African Line (Norweg), Elder Dempster Line (Brit.).

Hotels: Dakar: Central, Europe, Metropolitan, Palais.

French national holidays are observed. For Mohammedan holiday information see last paragraph under Algeria.

Gambia

Daytime temperatures are in the 80's, nights in the 60's or 70's with only a few degrees variation in average temperatures throughout the year. Very humid from June to October. Moderate rainfall with maximum during August and September. Best traveling time: December to March.

Monetary unit: British West African shilling. British currency used plus local coins of shilling (2, 1) and pence (6, 3, 1½). One West African shilling equals twelve pence.

Principal city: Bathurst.

Entry requirements: Passport, visa (by British consular officer), yellow fever certificate.

Airlines: Air France, British South American Airways, Ltd.

Steamships: To Bathurst: Elder Dempster Lines (Brit), Holland-West Africa (Dutch).

Hotels: Bathurst: Boarding house accommodations.

British national holidays are observed.

Gold Coast

Hot and humid with temperatures in the high 70's and 80's and only a few degrees variation in average monthly temperatures. Rainfall is moderate with wet season from April to November. Best traveling time: December to May.

Monetary unit: Same as Nigeria.

Principal city: Accra.

Entry requirements: Passport, visa (by British consular officer), yellow fever certificate. If not vouched for by firm or person of standing in the colony, must leave \$60 on deposit upon arrival.

Airlines: BOAC, PAA (Accra), Air France.

Steamships: To Accra: American West African Line (Norweg), Elder Dempster Line (Brit), Holland West African Line (Dutch).

British national holidays are observed.

Kenya

Coastal climate at Mombasa varies from an average temperature of about 75 in July to 80 from December to April, with about 10° variation daily. Interior elevations are much cooler with yearly averages varying from 60 to 66 at Nairobi and with snow remaining most of the year on the highest mountain peaks. Light to moderate rainfall is irregularly distributed with March to August being the wettest season. Best traveling time: October to February.

Monetary unit: East African shilling. Coins used: shilling (10, 5, 1); cent (50, 10, 5). One shilling equals 100 cents. British currency is also used.

Principal cities: Mombasa, Nairobi.

Entry requirements: Passport and visa (by British consular officer). If arriving from India, possession of smallpox vaccination certificate dated not less than twelve days or more than three years prior to departure from India. If arriving from West Africa, Belgian Congo or Lower Sudan, possession of yellow fever inoculation certificate dated not less than fourteen days or more than two years prior to departure. Women and children must obtain entry permit prior to departure and a deposit or bond is required.

Airlines: BOAC, Air France.

Steamships: To Mombasa: American South African Line (Amer), Furness, Withy & Co. (Brit), Norton, Lilly & Co. (Brit), Robin Line (Amer), Union Castle (Brit).

Hotels: Mombasa: Manor, Palace. Nairobi: Avenue, New Stanley, Salisbury, Torr's.

Good game hunting for lion, rhino, buffalo, eland, hippo, oryx, impala, water-buck, gazelle, wart hog, zebra.

British national holidays are observed.

Liberia

Very humid and warm with only about 5° variation in average monthly temperatures. Hottest months are March to May with temperature average about 82. Extremely heavy rainfall with rainy season from April to November and August the wettest month. Best traveling time: December to March.

Monetary unit: U. S. dollar. Coins used: British coins chiefly used plus Liberian cent (50, 25, 10, 2, 1). One dollar equals 100 cents.

Principal city: Monrovia.

Entry requirements: Passport, visa, yellow fever inoculation certificate.

Airlines: PAA (Monrovia), Air France.

Steamships: To Monrovia: American West African Line (Norweg), Elder Dempster (Brit), Holland West African (Dutch).

Hotels: Monrovia: Faulkner's.

Parades, speeches, balls honor Pioneers Day, January 7, Independence Day, July 26 (1947 is 100th anniversary). December 1 is Mathilda Newport Day, named for the "Joan of Arc" of Liberia.

Libya

Winters are cool, summers warm along coast, hot inland. There is about a 25° daily variation in temperatures and in Benghazi (January average 55, July 78) although summer days are in the 90's or higher, the nights are usually cool. Rainfall is very light and Libyan desert has practically none, making desert air dry, bringing frequent dust storms. Best traveling time: October to May.

Monetary unit: Italian currency.

Principal cities: Benghazi, Tripoli.

Entry requirements: U. S. State Department authorization.

Airlines: Air France, TWA (Tripoli).

Hotels: Tripoli: Grand Municipale.

For Mohammedan holiday information see last paragraph under Algeria.

Madagascar

Mild and warm on the east coast with temperatures averaging 79 in January and 69 in July. The highlands are ten or more degrees cooler. Rainfall is very heavy with most from January to March. The west coast is drier and about 5° hotter than the east. Heavy rainfall in the north, decreasing to very light in the southwest. Best traveling time: May to December.

Monetary unit: Same as France.

Principal cities: *Tananarive*, *Tamatave*.
Entry requirements: Passport and visa (by French consul).
Airlines: BOAC, Air France.
Steamships: To *Tamatave*: *Funch*, *Edye*; *Co.* (Brit), *Robin Line* (Amer).
Hotels: *Tamatave*: *France*, *Metropole*, *Plage*, *Poste*. *Tananarive*: *Colbert*, *du Commerce*, *Grand*, *Modern*.

French national holidays are observed. For Mohammedan holiday information see last paragraph under *Algeria*.

Morocco

Along the Atlantic coast the weather is cool with summer averages about 70, winters about 55 and small temperature range, very light rainfall, high relative humidities, heavy dews, frequent fogs. Between the coast and the Atlas range, summers are warmer (80's), winters cooler (50's) and there is less rainfall, no rain in summer except in the Atlas ranges. Hot, dry winds from the Sahara in spring, cool ocean winds in summer. Best traveling time: October to May.

Monetary unit: Moroccan franc. Coins used: franc (20, 10, 5, 2, 1); centime (50, 25, 10, 5). One franc equals 100 centimes.

Principal cities: *Casablanca*, *Fez*, *Marrakech* (Morocco), *Rabat*.

Entry requirements: Passport, visa (by French consular officer), yellow fever inoculation certificate, five photographs.

Airlines: Air France.

Steamships: To *Casablanca*: *American Export Lines* (Amer), *French Line* (French), *Isbrandtsen Line* (Amer), *Lykes Lines* (Amer), *United States and Levant Line*.

Hotels: *Casablanca*: *Ambassadeur*, *Anfa*, *Majestic*, *Trans-Atlantique*, *Plaza*. *Marrakech*: *de la Mamounia*, *Majestic*. *Rabat*: *Balima*, *Grand*, *Royal*.

Along the northern Mediterranean coast and extending inland one hundred to two hundred miles, is SPANISH MOROCCO in nearly the same latitude as southern California and with a similar warm climate, dry and hotter inland. Passport and visa (issued by Spanish consul) are required for entry and the chief cities are *Ceuta* and *Tetuan*. Hotels in *Tetuan*: *Alfonso XIII*, *Espana*. At the extreme northwest tip is the internationalized seaport of *TANGIER* governed jointly by Britain, France and Spain. Hotels in *Tangier*: *Continental*, *El Minzah*. Across the Strait is the British crown colony fortress of *GIBRALTAR*, connected to the Spanish mainland by a low, sandy strip of land. The Rock's numerous caves and tunnels are an interesting contrast to its colorful Gardens. Gibraltar is served by BOAC and the following steamship lines: *American Export Lines*, *Anchor*

Line (Brit), *Bibby Line* (Brit), *Ellerman Lines* (Brit), *Henderson Line* (Brit), *Orient Line* (Brit), *Rotterdam Lloyd* (Dutch), *Union Castle* (Brit). Gibraltar hotels: *Bristol*, *Cecil*, *Grand*, *Rock*.

French national holidays are observed. For Mohammedan holiday information see last paragraph under *Algeria*.

Mozambique

Summers hot with January averages about 80; winters cool with July averages about 68. The daily variation is from 15 to 20°. Light to moderate rainfall with frequent thunderstorms. The wet season is from November to April. Best traveling time: May to October.

Monetary unit: Portuguese currency.

Principal cities: *Beira*, *Lourenco Marques*, *Mozambique*.

Entry requirements: Passport and visa (issued by Portuguese consul). Authorization communication must be obtained, applicant paying expense. Travelers must have round-trip ticket or transportation to country beyond which will grant entry. All persons except British subjects remaining less than ninety days must deposit approximately \$250 in U. S. currency.

Airlines: Air France.

Steamships: To *Beira* and *Lourenco Marques*: *American South African Line* (Amer), *Barber Line* (Brit), *Furness Withy & Co.* (Brit), *Holland African Line* (Dutch), *Kerr SS Line* (Brit), *Lykes Lines* (Amer), *Norton, Lily & Co.* (Brit), *Robin Line* (Amer), *Silver-Java Pacific Line* (Dutch), *Union Castle* (Brit). To *Mozambique*: *Holland African Line*, *Union Castle*.

Hotels: *Beira*: *International*, *Queen's*, *Savoy*. *Lourenco Marques*: *Cardoza*, *Carlton*, *Polana*.

The town of Mozambique is on a small coral island at the mouth of the *Monapo River*; has only 7,000 population.

Portuguese holidays are observed as listed under *Angola*. For Mohammedan holiday information see last paragraph under *Algeria*.

Nigeria

Hot and humid with extremely heavy rainfall near the coast, decreasing to light rainfall in northern section. The rainy season lasts from March to November with maximum rains July to September. Coastal temperatures are about 80 with slight variation throughout the year. In the north, average temperatures are about 90 during warmest months, March to May, and about 75 in January. The daily variation is 10 or 15°. Best travel time: December to March.

Monetary unit: British West African

pound. Coins used: shilling (2, 1); pence (6, 3, 1, $\frac{1}{2}$). British coins are also used.

Principal city: *Lagos*.

Entry requirements: Passport and visa (by British consular officer), yellow fever inoculation certificate. If not vouched for by firm or person of standing in Nigeria, traveler must deposit £60 upon arrival.

Airlines: BOAC, Air France, Sabena.

Steamships: To Lagos: American West African Line (Amer), Elder Dempster Line (Brit).

Hotels: Lagos: Bristol, Grand.

British national holidays are observed.

Northern Rhodesia

Summer days are hot, nights mild. The average temperature at Livingstone in October is 80, in January 76 and July 66. Rainfall is light and there are frequent thunderstorms. The wet season lasts from November to April. Best traveling time: May to September.

Monetary unit: British currency. Local shilling (2, 1) and pence (6, 3, 1, $\frac{1}{2}$) also used.

Principal cities: Livingstone, *Lusaka*.

Entry requirements: Same as Union of South Africa.

Airlines: South African Airways.

Hotels: Lusaka: Grand, Lusaka.

British national holidays are observed.

Nyasaland

At Zomba, January temperatures average 72, July 61. Frequent thunderstorms, moderate rainfall, with wet season lasting from November to April. Best traveling time: May to October.

Monetary unit: British currency. Local shilling (2, 1) and pence (6, 3, 1, $\frac{1}{2}$) also used.

Principal city: Blantyre, *Zomba*.

Entry requirements: Same as Union of South Africa.

Hotels: Blantyre: African Lakes, Commercial, Ryalls.

British national holidays are observed.

Portuguese Guinea

Hot and humid with little variation in average monthly temperatures. Rainfall is light. Best traveling time: December to March.

Monetary unit: Portuguese currency.

Principal cities: Bissau, *Bolama*.

Entry requirements: Passport and visa. Authorization must be obtained, applicant paying communication expense.

Airlines: PAA (Bolama), Air France.

Hotels: Bolama: PAA passengers accom-

modated at PAA staff quarters. Boarding house accommodation available for other than PAA travelers.

Portuguese holidays are observed as listed under Angola. For Mohammedan holiday information see last paragraph under Algeria.

Rio de Oro

Although the average temperatures in Cape Yubi are in the 60's the year round inland areas are hot and arid. Rainfall is light. Best traveling time: December to March.

Monetary unit: Spanish currency.

Principal city: *Villa Cisneros*.

Entry requirements: Passport and visa (by Spanish consul).

Lying off the northwest coast are the CANARY ISLANDS with an equable and generally pleasant climate. The capital and principal port is Las Palmas, served by the following steamship lines: Blue Funnel & White Star (Brit.), Elder Dempster (Brit.), Holland West African (Dutch), Royal Mail Lines, Ltd. (Brit.), Union Castle (Brit.). Hotels at Las Palmas: Madrid, Metropole, Santa Brigida. Just north of Rio de Oro, in French Morocco, is the 965 square mile Spanish colony and town of Ifni, extending from the coast fifteen miles inland. As in the Canary Islands, the principal occupation is fishing. Currency and entry requirements for the Canary Islands and Ifni are the same as for Rio de Oro. Local transportation is available from Las Palmas to Rio de Oro and Ifni.

Sierra Leone

During March, April and May, the hottest months, the temperature averages 81 and there is only a 5° variation in monthly averages. Rainfall is extremely heavy, especially from April to November. Best traveling time: December to March.

Monetary unit: British West African pound. British coins are used plus local shilling (2, 1) and pence (6, 3, 1, $\frac{1}{2}$). One shilling equals twelve pence.

Principal city: *Freetown*.

Entry requirements: Passport, visa (by British consular officer), yellow fever inoculation certificate.

Airlines: Air France.

Steamships: To Freetown: American West African Line (Norweg), Elder Dempster Lines (Brit), Holland West African Line (Dutch).

Hotels: Freetown: City, Grand.

British national holidays are observed.

Southern Rhodesia

Summer days are hot, nights mild with average temperatures at Salisbury and

Bulawayo in January at 70, in July 56. In the highlands, frosty nights and ice occasionally occur during winter. Light rainfall and frequent thunderstorms with wet season from November to April. Best traveling time: May to October.

Monetary unit: British currency. Local shilling (2, 1) and pence (6, 3, 1, $\frac{1}{2}$) also used.

Principal cities: Bulawayo, *Salisbury*.

Entry requirements: Same as Union of South Africa.

Airlines: BOAC, Sabena.

Hotels: Salisbury: Meikles, Windsor. Bulawayo: Avenue, Carlton.

On the Zambezi River in the western part of country is Victoria Falls.

British national holidays are observed.

Southwest Africa

The average monthly temperatures range at Windhoek from 74 in December and January to 56 in June and July. Coastal temperatures are lower, due to the cool Benguela Current, but fogs are frequent. Very light rainfall, most (22 inches annually) occurring inland from October to June. Best traveling time: December to June.

Monetary unit: Southwest African pound. Coins used: shilling (2, 1); pence (6, 3, 1, $\frac{1}{2}$). One pound equals twenty shillings; one shilling equals twelve pence. British currency is also used.

Principal cities: Swakopmund, *Windhoek*.

Entry requirements: Same as Union of South Africa.

Airlines: South African Airways.

Hotels: Swakopmund: Eggers, Kaiserhof. Strand. Windhoek: Grossherzog, Kaiserkrone.

British national holidays are observed plus Dingaan's Day, December 16.

Spanish Guinea

Hot and humid with average monthly temperatures about 80 throughout the year. Heavy rainfall, with wet seasons during March and April, October and November. Best traveling time: May to October.

Monetary unit: Spanish currency.

Principal cities: Benito, *Santa Isabel*.

Entry requirements: Passport and visa (by Spanish consul).

Steamships: To Santa Isabel: Elder Dempster (Brit), Holland West African Line (Dutch).

Santa Isabel is actually on the island of Fernando Po, to the northwest of Benito. Local transportation to the mainland is available from Santa Isabel.

Tanganyika

Coastal temperatures at Dar es Salaam range from 74 in July to 82 in January. It is much cooler inland in higher elevations (at Gandala July average is 53, January 61). Rainfall is light to moderate and irregularly distributed. The wet season is from November to April in the southern section; March to May and November to December in the north. Best traveling time: June to October.

Monetary unit: East African shilling. Coins used: shilling (1); cent (50). Twenty shillings equal one East African pound; one shilling equals 100 cents. British currency is also used.

Principal cities: *Dar es Salaam*, Tanga.

Entry requirements: Same as the Union of South Africa.

Airlines: Air France.

Steamships: To Dar es Salaam and Tanga: American South African Line (Amer), Holland African Line (Dutch), Robin Line (Amer), Union Castle (Brit).

Hotels: Dar es Salaam: Burge, Central, New Africa. Tanga: Grand.

The Serengeti Plains in the vicinity of Arusha are considered the best lion country in the world. In the north is Lake Victoria, whose circumference is larger than Ireland. Also in the north is famed Mount Kilimanjaro. Twenty-five miles off the coast lies the British-controlled island of ZANZIBAR whose principal city is Zanzibar. Divided by highlands, the eastern part is unproductive, the western section fertile. The climate is tropical and rainfall averages 60 inches annually. Entry requirements are the same as for the Union of South Africa and the steamship lines listed above serve the island, whose population, though consisting of many nationalities, is mainly Moslem. Hotel in Zanzibar: Afrika.

British national holidays are observed in both Tanganyika and Zanzibar. For Mohammedan holiday information see last paragraph under Algeria.

Tunisia

Summers are hot, winters cool, with a 20 to 25° variation between day and night temperatures. In Tunis, the January average is 51, in August 80; summer days in the 90's and sometimes over 100, but the nights are nearly always cool. Rainfall is very light. Prevailing northeast winds prevent excessive heat. Best traveling time: October to May.

Monetary unit: French franc. Coins used: franc (2, 1); centime (50, 25, 10, 5, 2, 1). One franc equals 100 centimes. French currency is extensively used.

Principal cities: Bizerte, Sfax, *Tunis*.

Entry requirements: Passport, visa (by

French consular officer), yellow fever inoculation certificate, five photographs.

Airlines: TWA (Tunis), Air France.

Steamships: To Bizerte and Tunis: American Export Lines (Amer), French Line (French).

Hotels: Bizerte: France, Grand, Paix, Paris. Sfax: France, Oliviers. Tunis: Grand, Majestic, Moderne, Paris, Regence, St. George, Transatlantique, Tunisia.

French national holidays are observed. For Mohammedan holiday information see last paragraph under Algeria.

Uganda

The average monthly temperatures at Entebbe are about 70 the year around. The moderate rainfall is irregularly distributed, heaviest from March to May and November to December. Best traveling time: June to October.

Monetary unit: East African shilling. Coins used: shilling (1); cent (50, 10, 5). One shilling equals 100 cents. British currency is also used.

Principal cities: Entebbe, Kampala.

Entry requirements: Same as the Union of South Africa.

Airlines: South African Airways.

Hotels: Entebbe: Boarding house accommodations only. Kampala: Cecil, Imperial.

Although Entebbe is on Lake Victoria, its population is only around 6,000 and Kampala, a few miles northwest of Entebbe, population 40,000, is the main commercial center. Excellent big game hunting is available. Holidays celebrated are the same as the Union of South Africa, except that the King's Birthday is not observed.

Union of South Africa

In the coastal areas of the Cape Province, the average winter temperatures are about 60 in July, with summer temperatures varying from 70 to 80 and January the hottest month. Southeast gales are frequent and hot and oppressive "Berg" winds last several days. Rainfall is light with the wet season in the winter in the southwestern section, in summer in other areas. Inland, thunderstorms are frequent and sometimes quite severe, mostly occurring in June and October, with February receiving the fewest. In the Karoo plateau, winter temperatures are frequently below freezing (as low as 12°), the mountains often covered with snow, air very dry and a daily temperature range of about 30. Summer temperatures are sometimes as high as 110. Rainfall in the Orange Free State is light, the climate dry, and January temperatures at Kimberly average 78, July at 52. At Durban the average temperature in July is 65, in January 85, with a

daily range of about 20° and inland elevations, cooler, have a daily range of about 30°. Rainfall is moderate and thunderstorms frequent with October to March the wettest months. Farther north, in Transvaal, the January averages at Johannesburg and Pretoria are 66 and 72, respectively, with July about 50. The atmosphere is clear, fogless, and the heat is rarely oppressive even in summer when the nights are uniformly cool. Rainfall is light although there are short, sometimes violent, thunderstorms. At all seasons there is a pleasant breeze and in winter night frosts and cold winds are frequent.

Best traveling time: May to October.

Monetary unit: South African pound. Coins used: shilling (2, 1); pence (6, 3, 1, ½, ¼). One pound equals 20 shillings; one shilling equals 12 pence. British currency also used.

Principal cities: Capetown, Durban, East London, Johannesburg, Port Elizabeth, Pretoria.

Entry requirements: Passport and visa (issued by British consular officer). If arriving from India, possession of smallpox vaccination certificate dated not less than twelve days or more than three years prior to departure from India. If originating or having passed through any of the following countries, possession of yellow fever certificate dated not less than fourteen days or more than two years prior to departure: Angola, Anglo-Egyptian Sudan (south of Khartoum), Belgian Congo, Cameroons, Ethiopia, French Equatorial Africa, French Guinea, French West Africa, Gambia, Gold Coast, Liberia, Nigeria, Sierra Leone, Uganda. Consuls must obtain authorization from the Union, applicant paying communication expense. Travelers must have round-trip tickets or transportation to a country beyond granting entry. A deposit of from £5 to £75 may be required of certain persons.

Airlines: BOAC, PAA (Capetown, Johannesburg), Sabena, South African Airways.

Steamships: To Capetown and Durban: American South African Line (Amer), Barber Line (Brit), Blue Funnel & White Star (Brit), Ellerman & Bucknell Line (Brit), Holland Africa Line (Dutch), Lykes Lines (Amer), Robin Line (Amer), Silver-Java Pacific Line (Dutch), Union Castle Line (Brit), Wilhelmsen Line (Norweg). To East London and Port Elizabeth: Same except for Wilhelmsen Line.

Hotels: Capetown: Assembly, Carlton, Cumberland, Grand, Imperial, Langham, Metropole, Mount Nelson. Durban: Balmoral, Beach, Caister, Marine, Osborne, Royal. East London: Marine, Windsor. Johannesburg: Carlton, Grand National, Heath's, Langham, Linton's, Moon, Orange Grove, Waverly. Port Elizabeth: Algoa,

beach, Elizabeth, King Edward, New Marine, Park, Pollock. Pretoria: Arcadia, Casa Mia, Eaton Hall, Edward, Grand, Hellenic, Imperial, Polley's.

Horse racing in July at Durban, the Summer Handicap in Johannesburg, the Metropolitan Handicap at the Cape are all brilliant social events. Excellent sea fishing off Cape and Natal coasts. One night journey from Johannesburg or Pretoria to the Kruger National Game Reserve, 8,000 square miles, largest wild animal sanctuary in the world. Dignified South Africans (over two million whites and usually referred to in South Africa as

Europeans) have no spectacular holiday celebrations such as the Mardi Gras in New Orleans. Shying from public demonstrations, they usually spend their holidays and celebrations of special occasions by going to the beaches, picnicking, dancing. Such days include Empire Day, May 24; Union Day, May 31; the King's birthday, first Monday in August. Dingaan's Day honors a Kaffir chief on December 16 with Afrikaan dances, parades. Black natives hold a Carnival in Capetown January 1-2 with parades, masquerades, dances. The Union has two official languages: English and Afrikaans.

MIDDLE EAST

Iran

The Shamal, a dust-laden northerly wind, blows fairly consistently for about four months in summer, carrying dust far into the Persian Gulf in June. In July, the southwest monsoon strikes the coast while in Siestan (Eastern Iran) the wind sets in at the end of May and continues to September, reaching 70 mph at times. The mean average temperature over the coast of Mekran is 80, at Bushire 75, lower in the interior. In the north, the July temperatures are 40° warmer than January, lessening to 22° warmer on the south coast. Winters in the highlands are severe. The January mean at Teheran is 35, at Isfahan below zero for the same month. During July and August, temperatures average over 80 in almost all Iran. The days are hot, the nights cool, except on the coast where the nights are warm, oppressive. Rainfall is light on the Mekran coast, averages 56 inches annually at Resht, lessening southward with rain falling spasmodically from October to May and reaching peaks during December and then March. Between December and April, snow falls in altitudes above 4,000 feet and passes are closed to vehicular traffic. Best traveling time: April, May; September, October.

Monetary unit: rial. Coins used: dinar (100, 25, 10, 5, 2, 1); shahi (3, 2, 1); kran (5, 2, 1, ½, ¼); toman (10, 5, 2, 1, ½, ¼); rial (2, 1, ½); pahlevi (5, 2, 1, ½). 50 dinars equal one shahi; twenty shahis equal one kran; ten krans equal one toman; 100 dinars equal one rial; 100 rials equal one pahlevi.

Principal cities: Hamadan, Isfahan, Mashbad, Resht, Shiraz, Tabriz, Teheran.

Entry requirements: Passport and visa. Authorization must be obtained from Iran, applicant paying communication expense.

Airlines: BOAC, KLM, Air France.

Steamships: To Abadan and Khoramshar: Isthmian Line (Amer); Norton Lilly (Brit).

Hotels: Teheran: Grand, Teheran Lalezar.

For Mohammedan holiday information see last paragraph under Algeria in African section.

Iraq

The winters fluctuate between clear skies, with cold dry winds from the northwest and rainy, cloudy days but a warm southeasterly wind. Snow falls infrequently but the January average at Baghdad is 49, at Mosul 40. Summers are hot and often dusty, the average monthly temperature at Baghdad for June being 90, rising to an average of 94 in both July and August. Rainfall is very light and almost nonexistent from June to October, most rain occurring during the spring thunder-showers. Best traveling time: March, April; October, November.

Monetary unit: Iraq dinar. Coins used: fil (200, 50, 20, 10, 4, 2, 1). One dinar equals one thousand fils.

Principal cities: Baghdad, Basra, Mosul, Sugash Shuyukh.

Entry requirements: Passport, visa (issued by British consular officer), cholera certificate. If arriving from India or Iran, possession of smallpox vaccination certificate.

Airlines: BOAC, KLM, Air France.

Steamships: To Basra: Isthmian Line (Amer), Java-Pacific Line (Dutch), Norton Lilly (Brit).

Hotels: Baghdad: Regent Palace, Semiramis. Basra: Rest House, Shatt-al-Arab.

For Mohammedan holiday information see last paragraph under Algeria in African section.

Palestine

In the Judea mountains the average monthly temperatures range from 44 in January to 73 in August. The coastal area is warmer (53 in January, 78 in August)

and in the Jordan valley the January and August averages are, respectively, 55 and 87. There is considerable daily temperature range, especially in the Jordan valley where temperatures occasionally rise from freezing to 80 within twenty-four hours. The Sirocco occurs in May and October but the period is brief. On hot, dry summer days, temperatures sometimes reach 100 in the shade but the usual high is 80 or 90. The southern end of Jordan receives the least rain and the rainfall on the coast and in the mountains is light, being only 28 inches annually and even less around the Sea of Galilee. Most rain falls during October, November, March and April. Best traveling time: October to May.

Monetary unit: Palestine pound. Coins used: mil (100, 50, 20, 10, 5, 2, 1). One pound equals one thousand mils.

Principal cities: Haifa, *Jerusalem*, Tel Aviv.

Entry requirements: Passport and visa (issued by British consular officer). If having passed through the following countries, possession of yellow fever inoculation certificate dated not less than fourteen days nor more than two years prior to entry: Angola, Anglo-Egyptian Sudan (south of Khartoum), Belgian Congo, Ethiopia, French Equatorial Africa, French West Africa, Gambia, Gold Coast, Liberia, Nigeria, Sierra Leone, Uganda.

Steamships: To Haifa: American Export Line (Amer), Barber Line (Brit), Fern Line (Norweg), Kerr SS Line (Brit), Prince Line (Brit). To Jaffa and Tel Aviv: American Export Line, Barber Line.

Hotels: Haifa: Appinger, Windsor, Windsor Annex. Jerusalem: American Colony, Eden, King David, St. Andrew's. Tel Aviv: Gat Rimmon, San Remo, Yarden. Christian travelers may be sheltered in Bethlehem at the Franciscan Hospice by special arrangement with the custodian.

East of Palestine and south of Syria is TRANSJORDAN, hot, dry, mainly desert except for a thirty-mile stretch of land in the west. The population is mainly Mohammedan and the chief city is *Amman*. Entry requirements are the same as for Palestine. For Mohammedan holiday information see last paragraph under Algeria in the African section.

Saudi-Arabia

(Including Political Divisions)

The Arabian peninsula is mainly desert and the climate is typical of hot, sandy areas with considerable daily variation. The inland climate is comparable to the Sahara. The mountains of Yemen receive moderate summer rain but the Oman area has only very light precipitation, most falling in winter. Aden has only 2 inches of rainfall annually and the mean temperature in June, its hottest month, is 89.

Jeddah, on the coast, averages 93 as a daily high during August and its lowest daily average is 68 in January. Best traveling time: December to April.

Monetary unit: English gold sovereign. Coins used: rupee (1, $\frac{1}{2}$, $\frac{1}{4}$); piastre (1, $\frac{1}{2}$, $\frac{1}{4}$); ryal (1, $\frac{1}{2}$, $\frac{1}{4}$). Two rupees equal one piastre; eleven piastres equal one ryal.

Principal cities: *Aden* (Aden), Hodeida (Yemen), Jeddah, *Mecca*, Medina, *Sana* (Yemen).

Entry requirements: Passport and visa (issued by British Consular Officer).

Airlines: TWA (Dhahran).

Steamships: To Aden: Blue Funnel (Brit), Holland East Asia (Dutch), Isthmian Line (Amer), Union Castle (Brit). To Jeddah: Isthmian Line.

Hotels: Aden: Europe, Grand Royal at Steamer Point. Hodeida and Medina: Boarding house accommodations. Christians are not allowed to remain in Mecca, foreign diplomats staying at Jeddah.

At Sheikh Othman in Aden, sometime between November and February (the fruit season), the Fête of Hashem Bahr is held in which tom-tom squads and dancing dervishes parade to the mosque where dagger men dance. For Mohammedan holiday information see last paragraph under Algeria in African section.

Syria and Lebanon

The Mediterranean strip has the most favorable climate, Beirut's mean average temperature being 68, the rainfall 22 inches per year. The cities of Aleppo and Damascus are hot and the sandy interior is typical of desert regions with daytime heat and temperatures dropping to coolness at night. In early summer, hot winds blow from the desert interior and in winter the Syrian mountains have frost, the coast ranges do not. In the Lebanese mountains, rainfall often exceeds 40 inches annually. Best traveling time: October to May.

Monetary unit: Syrian pound. Coins used: piaster (50, 25, 10, 5, 2, 1, $\frac{1}{2}$). One pound equals 100 piasters.

Principal cities: Aleppo, *Beirut* (Lebanon), *Damascus*.

Entry requirements: Passport and visa. Typhoid, typhus and smallpox inoculations not required but officially advised.

Airlines: BOAC, Air France.

Steamships: To Beirut: American Export Line (Amer), Prince Line (Brit), Barber Line (Brit).

Hotels: Beirut: Grand, Normandy, St. George. Damascus: Omayad, Orient-Palace.

For Mohammedan holiday information see last paragraph under Algeria in African section.

Turkey

Along the coast from the Troad to Batum the hills are under snow in spring and winter and icy winds blow from Russia. At Istanbul, the mean average temperature in January and February is 41, in August and a daily maximum that month of 71. Eastern Thrace is similar to Istanbul, living, as that city, blizzards in winter. A warmer Mediterranean climate is found on the Troad along the Ionian coast to Adana and around to the south coast as far as Adana. The rest of the country has frequent light snowfall in winter, an average of 90 in summer. Rainfall is very light on the coast; only 30 to 40 inches annually in Eastern Thrace and Gallipoli, the wettest sections. The central plateau receives about ten inches of rain a year in early summer. Best traveling time: May to September.

Monetary unit: Turkish piaster (by law); Turkish pound (in practice). Coins used: piaster (500, 250, 100, 50, 25, 20, 10, 5, 2, 1); para (40, 20, 10, 5). One pound equals 100 piasters; one piaster equals 40 paras.

Principal cities: *Ankara, Istanbul, Smyrna, Uskudar.*

Entry requirements: Passport and visa.

Airlines: BOAC, Air France.

Steamships: To Istanbul: American Export Line (Amer), Barber Line (Brit), Fern Line (Norweg), Greek Line (Greek), Furness Line (Brit), Ellerman, Westcott and Laurence (Brit).

Hotels: Ankara: Ankara Palace. Istanbul: Parc, Pera Palace, Pokatlyian. Smyrna: Izmir Palace.

For Mohammedan holiday information see last paragraph under Algeria in African section.

ASIA

Afghanistan

Mountainous terrain with winter temperatures ranging in the north from -12 to 15 and in summer the Oxus region has temperatures sometimes 110 or 120 in the shade. From May to November the daily temperature range exceeds 30°. Summers, hot throughout the country, are particularly bad around Kandahar which has dust storms and few winters with snow. Rainfall, in the spring, is light. Best traveling time: April, May; September, October.

Monetary unit: afghani. Coins used: afghani (2, 1, ½); afghani (2½, 1, ½); rassa (20, 1); Puls (25, 10, 5, 3, 2, 1); diran (1); rupee (6, 5, 1, ½, ¼). One rupee equals 2 quirans or 12 shahis or 60 assas or 90 puls; one amani equals 20 ghanis.

Principal cities: *Herat, Kabul, Kandahar.*

Entry requirements: Passport and visa (issued by Turkish consuls).

The country has no railroads, horses and mules being the chief form of transportation passing through the Khyber Pass, main artery from Kabul to Peshawar, India. Population is chiefly Mohammedan. For Mohammedan holiday information see last paragraph under Algeria in African section.

China

For its latitude, north China has unusually severe winters and Peking's average January temperature is 23. Territory north of the Hwai River has at least one month whose mean temperature is below freezing. The Yangtze Valley is warmer yet the wide expanses of Tung-ting and Po-yang in the valley are often frozen and in summer, after the rains, at flood stage frequently.

Southern China has warm winters and, as in even north China, the season is brief and spring comes comparatively soon. Throughout China, summer temperatures are fairly uniform, with Peking, Shanghai and Hong Kong all averaging in the low 80s in June and high temperatures are less prolonged in the north. In July and August, however, Shanghai's average daytime temperature is 90, warmer than Hong Kong at 87 then. South China has temperatures over 60 almost all year, Hong Kong's lowest monthly average being 55 in the coldest month, February, the average high for that month being 63. Temperatures go over 60 in the Yangtze Valley for six to seven months of the year and are this high about five months of the year even in north China. The sheltered Red Basin of Szechwan has milder winters and cooler summers than the valley below the Gorges. As a whole, southeast China receives more rain (60 inches annually) than the southwest plateaux and the basin of Szechwan in the interior, which has about 40 inches of rain annually. Except for high precipitation on the southern coastal strip, the summer rains of south China are evenly distributed. About 45 inches of rain fall yearly in the Yangtze delta, lessening to 20 or 30 inches on the plain to the north of the Hwai River, dwindling to less than 20 inches on the loess plateau of northwest China and dying to nothing as the Gobi Desert is approached. Rainfall is heaviest from June to August, the season of the southeast monsoon, and least at the height of the northwest monsoon, from September to March. Peking receives three-fourths of its rain in the summer, although Shanghai has only slightly less than half its total during this season. Best traveling time: April to November.

Monetary unit: Chinese dollar. Coins used: dollar (1, $\frac{1}{2}$); Cent (20, 10, 5, 2, 1, $\frac{1}{2}$); cash (200, 100, 50, 20, 10, 5, 2, 1); fen (20, 10, 5, 1, $\frac{1}{2}$). One dollar equals 100 cents; one cent equals 10 cash.

Principal cities: Amoy, Canton, Changchow, Changsha, Chengtu, *Chungking*, Foochow, Hangchow, Hankow, Hanyang, Hong Kong, Lanchow, Nanking, Ningpo, Peking, Shanghai, Sian, Soochow, Tientsin, Tsinan, Tsingtao, Wenchow, Wuchang.

Entry requirements: Passport, visa, inoculations against cholera, typhoid/paratyphoid, typhus, plague and smallpox.

Airlines: PAA (Amoy, Canton, Chengtu, Chungking, Hankow, Hong Kong, Lanchow, Nanking, Peking, Shanghai, Sian, Tientsin, Tsinan, Tsingtao).

Steamships. To Hong Kong: American President Lines (Amer), Australian Oriental Line (Austral), Blue Funnel (Brit), De La Rama Line (Swed), Fern Line (Norweg), Furness Withy (Brit), Isthmian Line (Amer), Klaveness Line (Norweg), Norton, Lilly Lines (Brit). To Shanghai: American Pioneer Line (Amer), American President Lines, Barber Line (Brit), Blue Funnel Lines, De La Rama Line, East Asiatic (Dutch), Fern Line, Furness Withy Lines, Isthmian Line, Klaveness Line, Lykes Lines (Amer), Norton, Lilly Lines, Pacific-Orient Express (Norweg), Silver Line (Brit), Waterman Lines (Amer).

Hotels: Canton: Victoria. Chungking: Chialing House, Chungking Hostel. Hong Kong: Gloucester, Hong Kong; Metropole, Peninsula (at Kowloon on Chinese mainland), Repulse Bay. Nanking: Bridge House, Yangtze. Peking: Grand Hotel de Pekin, Grand Hotel des Wagons-Lits. Shanghai: Broadway Mansions, Cathay, Cathay Mansions, Metropole, Palace, Park. Tientsin: Imperial. Tsingtao: Grand, Strand.

American Express Offices: Hong Kong: 4 Des Voeux Road Central. Shanghai: 158 Kiukiang Road.

Set national holidays observed with speeches, parades and fireworks displays are January 1, anniversary of the founding of the Republic; March 29, Martyr's Day and Youth's Day, honoring seventy-two young revolutionists who fell in the uprising preceding the founding of the Republic; October 10, Independence Day, the anniversary of the revolution; November 12, the birthday of Dr. Sun Yat Sen, founder of the Republic, and also the anniversary of the founding of the Kuomintang. Many holidays are based on the lunar calendar. In late January or early February, the biggest street celebrations of the year welcome the lunar New Year with merrymaking, lanterns at night, fireworks. In June, traditional races are held for the Dragon Boat Festival with musicians and celebrants boarding gaily decorated boats shaped like dragons. A Mid-autumn Festi-

val is held in September with games, music, family reunions, fairs and bazaars in which dolls and toys are featured. China has many religious sects who observe their own distinct customs and occasions, including an estimated 48 million Mohammedans. For Mohammedan holiday information see last paragraph under Algeria in African section.

The traveler should remember that HONG KONG, although included here for convenience, is actually a British crown colony off the southeast coast of China. Hong Kong is a thirty-two square mile island and the Hong Kong city (officially named Victoria) lies on the northern shore. The remainder of the island is mostly uncultivated as behind the city is a range of granite hills, extensively quarried, whose crowning point is Victoria Peak, 1,825 feet high, from which a magnificent view of the harbor may be had.

French Indo-China

In Cochinchina and Cambodia, the northeast monsoon lasts from October 1 to April 15, temperatures varying but slightly from 80 by day, 68 by night, and this period is known as the dry season. From April 15 to October 15 the monsoon blows southwest and the rains set in. During this period the temperature rises to 80 and stays there day and night with only the slightest of variation. April and May are the hottest months, however, because of humidity. The province of Annam receives rain in September and has a 59° temperature then. June, July and August are dry and the Annam temperature ranges from 86 to 95, the nights slightly cooler. In the north, Tonkin province has winter from October to May with the temperature rarely over 75, often 50°. Summer, however, is torrid with airless nights. In the interior it is cooler and drier, the higher altitude, valleys and hills bringing a more varying climate. Best traveling time: November to February.

Monetary unit: piastre. Coins used: piastre; cent (20, 10, 5, 1, $\frac{1}{2}$, $\frac{1}{4}$). One piastre equals 100 cents.

Principal cities: Cholon, Haiphong, Hanoi, Saigon.

Entry requirements: Passport and visa (issued by French consul).

Airlines: PAA (Hanoi).

Steamships: To Saigon: American President Lines (Amer).

Hotels: Hanoi: Metropole, Splendid. Saigon: Continental Palace, Majestic.

French national holidays are observed.

India and Burma

Keeping in mind the vast territory that ranges from steamy jungles to eternally snowed crags, India has four defined sea-

the cold season, January and February; the hot season, March, April and May; the southwest monsoon period, from June to October; the retreating monsoon, November and December. Northern India has great temperature variation and in the Punjab from November to February it is 30° lower than in southern India where the temperature remains fairly constant all year. In the Punjab, the United Provinces and northern India generally, from November to February the weather is cool, dry, cloudless, comparable to the Riviera. In mid-March, however, the hot season starts and temperatures rise until the sun-break in June. The highest temperatures occur in May in the Upper Sind, Northwest Rajputana and southwest Punjab, exceeding 110 in the daytime and averaging 90 over the interior, 95 in the central part. The southwest monsoon sets in the first two weeks of June on the Bombay and Bengal coasts, bringing more or less general rain during the next three months in every part of India, but the distribution is uneven. At Cherrapunji in the Khasi hills, the downpour is tremendous, reaching an average of 500 inches per year, most during June, July and August, while the 100 to 200 mile strip in west Deccan parallel to the Ghats together with the Myrora tableland and the Carnatic is often subject to droughts. The Bengal monsoon brings rain to greater part of the Central Provinces and Central India, Orissa and Bengal, diminishing rapidly northwest of that band. Karachi has about six inches of annual rain and the precipitation is heavier moving toward the Ganges River. Calcutta receives around 60 inches of yearly rain. In September, the monsoon force declines. The most unhealthy season is immediately following the rains, especially in northern India. Off India's southeast coast is the island of CEYLON, whose chief city, Colombo, has daytime averages in the high 80s throughout the year. Best traveling time: November to February.

Monetary unit: rupee. Coins used: rupee (1, ½, ¼, ⅓); anna (8, 4, 2, 1, ½, ⅓); pice (1, ½). One rupee equals 16 annas; one anna equals 12 pices; one pice equals 4 annas.

Principal cities: Agra, Ahmedabad, Amritsar, Allahabad, Amritsar, Bangalore, Bikaner, Baroda, Benares, Bombay, Calcutta, Cawnpore, Dacca, Delhi, Howrah, Hyderabad, Indore, Jaipur, Jubbulpore, Karachi, Lahore, Lucknow, Madras, Malabar, Mandalay (Burma), Moradabad, Moulmein (Burma), Multan, Mysore, Nagpur, New Delhi, Patna, Poona, Rangoon (Burma), Secunderabad, Sholapur, Srirangapatna, Trichinopoly.

Entry requirements: Passport, visa (issued by British consular officer), smallpox vaccination certificate. If having passed through the following countries, posses-

sion of yellow fever inoculation certificate dated not less than fourteen days nor more than two years prior to entry: Angola, Anglo-Egyptian Sudan (south of Khartoum), Belgian Congo, Ethiopia, French Equatorial Africa, French Guiana, French West Africa, Gambia, Gold Coast, Liberia, Nigeria, Sierra Leone, Uganda. Authorization must be obtained from Indian government, applicant paying communication expense. The maintenance and repatriation of all persons other than British subjects must be guaranteed by a person, firm or other organization in India and if guarantee is unavailable, sufficient funds must be deposited or bond given to cover return passage.

Airlines: BOAC, PAA (Calcutta), Indian National Airways.

Steamships: To Bombay: American Export Lines (Amer), American President Lines (Amer), British India Steam and Navigation Co. (Brit), Isthmian Line (Amer), Java-Pacific Line (Dutch), Norton, Lilly Lines (Brit), Silver-Java Line (Dutch). To Calcutta, Karachi, Madras and Rangoon: Same as to Bombay except for American President Lines. To Colombo, Ceylon: American President Lines, American Export Lines.

Hotels: Agra: Cecil, Empress, Imperial, Laures. Ahmedabad: Grand. Alahabad: Grand. Bangalore: Westend, Lavender. Benares: Clarks. Bombay: Grand, Majestic, Ritz, Taj Mahal. Calcutta: Grand, Great Eastern. Cawnpore: Berkeley House. Delhi: Cecil, Maidens, Swiss. Gwalior: Grand. Jaipur: Jaipur State, New, Kaiser-I-Hind. Karachi: Carlton, Killarney. Lahore: Faletti's, Nedous, Mandalay. Railway Restrooms. Madras: Connemara. Mysore: Carlton, Metropole. Peshawar: Deans. Poona: Napier. Rangoon: Strand. Rawalpindi: Flashman's. Colombo: Bristol, Galle Face, Grand Oriental.

American Express Offices: Bombay: Navsari Bldg., 240 Hornby Road. Calcutta: Pollock House, Pollock Street, Brabourne Road. Karachi: Oriental Bldg., McLeod Road.

Important Hindu holidays are celebrated with picturesque processions, fireworks and colored lights such as for Holi at the end of March, Dassera in the middle of October and Diwali near the end of October. There are numerous local holidays such as Coconut Day in Bombay on August 12, and throughout India sports such as cricket, tennis, golf, polo, and especially horse racing, are quite popular. In Burma, water festivals are held in April, near the end of the dry season, with pagoda ceremonies involving prayers for rain. In September, flowers, ceremonies and outdoor dramatic performances mark the end of Buddhist Lent. During the Feast of Lights in October the streets of towns and vil-

lages are illuminated by paper lanterns, floats bearing lighted candles are set adrift on rivers, and native dances and plays are given. Hindu holidays, as in India, are observed. There are many Mohammedans in both India and Burma. For Mohammedan holiday information see last paragraph under Algeria in African section.

Japan

Winters are long and cold, with temperatures progressively colder in northern latitudes. In January in Tokyo the days average about 47, the nights near 30. In the mountainous sections there is snow all winter. The hot, short summers are cooler in the northern islands. The warmest month in Tokyo is August, with average day temperature at 85, night near 72. Rainfall is moderate to very heavy throughout the year, most sections receiving heaviest precipitation during the summer. Best traveling time: May to September.

Principal cities: Fukuoka, Hakodate, Hamamatsu, Hiroshima (?), Kagoshima, Kanazawa, Kobe, Kumamoto, Kure, Kyoto, Moji, Nagasaki (?), Nagoya, Niigata, Okayama, Osaka, Otaru, Sakai, Sapporo, Sasebo, Sendai, Shizuoka, Taihoku, Tokyo, Wakayama, Yokohama, Yokosuka.

Entry requirements: U. S. State Department authorization.

Steamships: To Kobe, Yokohama: American President Lines (Amer).

Malay States

The Federated Malay States, under protection of Great Britain but not British possessions are: Perak, Selangor, Pahang and nine small states called Negri Sembilan. The Unfederated States, under British protection, are: Johore, Kelantan, Trengganu, Kedah and Perlis. The city of Singapore lies on an island just south of Johore. Climatically, Singapore is the hottest part of the States, having a high humidity and monthly temperature average about 88 all year. The mainland is cooler, particularly on the eastern slope, with temperatures below 70 at night. Rainfall on the west coast ranges from 64 inches to 115 inches yearly and on the east coast (where the monsoon strikes hardest), 112 inches annually. Best traveling time: November to February.

Monetary unit: Straits Settlements dollar. Coins used: dollar; cent (50, 20, 10, 5, 1, $\frac{1}{2}$, $\frac{1}{4}$). One dollar equals 100 cents.

Principal cities: Georgetown, Kuala Lumpur, Malacca, Singapore.

Entry requirements: Passport, visa (issued by British consular officer), cholera and yellow fever inoculation certificates, smallpox vaccination certificate.

Airlines: BOAC.

Steamships: To Singapore: American President Lines (Amer), Blue Funnel Lines

(Brit), Isthmian Lines (Amer), Norton, Lilly (Brit), U. S. Lines (Amer).

Hotels: Kuala Lumpur: Majestic, Station. Malacca: Resthouse. Singapore: Adelphi, Raffles, Sea View.

Manchuria

Winters are cold, summers hot, with midsummer temperatures averaging 70 to 75, dropping to 24 in winter at Dairen and below zero at Harbin. In the north the rivers are frozen over until April, only Port Arthur and Dairen in the south remaining free from ice all year. Rain is light in summer, heaviest in the East Manchurian Highlands and least in East Gobi. Best traveling time: May to September.

Monetary unit: yuan. Coins used: chiao (5, 1); fen (5, 1); li (5). One yuan equals ten chiao; one chiao equals ten fen; one fen equals ten li.

Principal cities: Chengte, Dairen, Harbin, Hsinking, Kirin, Mukden, Port Arthur.

Entry requirements: Passport and visa (issued by Chinese government only after traveler is in China).

Hotels: Dairen, Harbin, Hsinking, Mukden and Port Arthur: Yamato.

Netherlands East Indies

This vast equatorial area is mountainous in many places, generally hot, moist, with a mean average temperature of 80 across the islands and only a 2° or 3° annual variation. The daily minimum temperature at Batavia, JAVA, is 72 in August with 96 and 65 the highest and lowest recordings in that city. At Koepang, TIMOR, the July mean is 77 and 59 is the lowest known temperature. The mountains and the west and south coasts of SUMATRA and Java sometimes receive 250 inches of rain annually while the plains of east Sumatra receive 80 inches per year. The rains are heavy and hard but brief and the actual number of rainy days yearly is not uncommonly high. Most of Java's northern coast has 40 inches of rain per year but the heavy, short-lived showers give Batavia 72 inches annually yet the city has more frequent clear days than northwest Europe. Due to latitude, mountains and valleys and the numerous island formations, the rainy seasons differ greatly even on two sides of the same island but in general the Sumatra-Java area on the whole is rainy, hot and sultry from May to October. The cool, dry season is December and January; the hot, dry season during February, March and April. Best traveling time: November to February. North of Java is NETHERLANDS BORNEO, oppressive, humid, damp, hot on the coast, somewhat cooler inland. Temperatures average 78 to 86 throughout the country, rarely drop below 70 or rise above 96. Rainfall averages 150 inches yearly on the island, most oc-

During from November to May in torrential downpours. The northern sector of the island is BRITISH NORTH BORNEO and monthly temperature averages at Sandakan are consistently in the low 80s with a very slight variation all year. Heavy rains occur from October to January, the driest month being April which normally averages 4 inches of rainfall. SARAWAK and BRUNEI complete the northwest section of the island and temperatures average about 70 at night, rarely over 90 during the daytime. There is no definite dry season, although most rain falls from October to March. Kuching, Sarawak, averages 160 inches annually. Best traveling time throughout Borneo: April to September. East of Borneo lie the CELEBES, hot but tempered by sea breezes. The mean temperature ranges from 86 to 72, falling to 70 in the higher mountain altitudes. Rain on the west coast averages 20 inches at Malu, while at Macassar the annual average is 116 inches. Manado and Gorontalo, both on the northeast peninsula, average 106 inches and 47 inches annually, respectively. Farther eastward is the island of NEW GUINEA, whose temperature averages about 72 in the morning, is about 92 at noon. About 96 inches of rain falls on the east coast annually but is greater on exposed heights, lessening westward. In PAPUA, the dry season is from June to September with December to March rainy, Port Moresby receiving 40 inches of rain per year, yet Kikori, on the northeast shore of the gulf, has 230 inches annually, most falling during May and June, September and October. Throughout the Papua Territory, the mean average temperature is 78, with July and August the coolest months. Best traveling time throughout the island of New Guinea: June to October.

Monetary unit: Dutch currency. In British North Borneo, the Straits dollar; in Papua Territory, Australian currency.

Principal cities: *Batavia* (Java), *Macassar* (Celebes), *Padang* (Sumatra), *Palembang* (Sumatra), *Soerabaja* (Java), *Semarang* (Java).

Entry requirements: Passport, British and/or Dutch visa. Inoculations not required but officially advised if entering Dutch territory. If visiting British territory in the Indies, possession of yellow fever inoculation and smallpox vaccination certificates.

Airlines: BOAC, Royal Netherlands Indies Airways.

Steamships: To *Batavia*: American Pioneer Line (Amer), American President Lines (Amer), Blue Funnel Line (Brit), Isthmian Line (Amer), Java-Pacific Line (Dutch).

Hotels: *Batavia*: Des Indes Nederlanden. *Padang*: Oranje. *Macassar*: Grand. *Semarang*: Pavillon. *Soerabaja*: Oranje.

The birthday of Queen Wilhelmina is

celebrated August 31 with military and sports events, fireworks and illuminations, Chinese and Indonesian decorations and processions. For Mohammedan holiday information see last paragraph under *Algeria* in African section.

Philippine Islands

Although May is the warmest month, January the coolest, the mean annual temperature is 80 and monthly variation is slight, April to October averaging 80 to 82 and November to March at an average of 78 to 80. In western Luzon, Mindoro, Negros and Palawan and western and southern Panay, winter and spring are considered the dry season, receiving only 2 inches of rain during this period, with summer and autumn the wet. Along the eastern part of the archipelago, in southeastern Luzon, Samar, eastern Leyte in the Surigao Province of Mindanao, there is no well-defined dry season and the maximum rainfall occurs in winter. Average annual rainfall for the Philippines reaches 93 inches to 100 inches, with Benguet usually receiving the most. Considering the islands as a whole, in general there are three seasons: January to May, dry; June to October, rainy; November to December, relatively dry. Best traveling time: November to March.

Monetary unit: peso. Coins used: peso; centavo (50, 20, 10, 5, 1). One peso equals 100 centavos.

Principal cities: Cebu, *Manila*.

Entry requirements: Passport, smallpox vaccination certificate.

Airlines: PAA (*Manila*).

Steamships: To *Manila*: American Pioneer Line (Amer), American President Lines (Amer), Barber Line (Brit), Blue Funnel (Brit), Isthmian Line (Amer), Klaveness Line (Norweg), Lykes Lines (Amer), Norton, Lilly Lines (Brit), Silver-Java Pacific Line (Dutch), Waterman Lines (Amer).

Hotels: Cebu: Shamrock. *Manila*: Manila.

American Express Office: Manila: El Hogar Filipino Bldg., Calle Juan Luna.

Almost all towns and villages have fiestas honoring local patron saints, the dates varying with the communities. May Day, however, is observed widely with processions and with flower displays lasting the entire month. Official holidays, marked by parades, fireworks, floral offerings, dances and pageants, include July 4, Philippine Independence Day; November 30, National Heroes Day, honoring Philippine patriots; and December 30, José Rizal Day, commemorating execution in 1896 of national hero.

Siam

The wet season lasts from May to October but the full force of the monsoon is

broken by western frontier hills, giving Bangkok 50 inches of rain annually. During the wet season, the temperature averages 65 to 75 at night, 75 to 85 during the day and when the rain breaks it is hot and steamy. The northeast monsoon brings cooler weather in November, the nights averaging between 40 and 50, the days 80 to 85, occasionally 90. In February, the coast gets some sea breezes. Temperatures inland sometimes rise above 100. Best traveling time: November to March.

Monetary unit: baht or tical. Coins used:

tical (1, $\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{8}$); att (2, 1, $\frac{1}{2}$); satang (10, 5, 1, $\frac{1}{2}$). One baht or tical equals 64 atts or 100 satangs.

Principal cities: *Bangkok*, *Chiengmai*, *Nagor Rajasima*, *Ubol*.

Entry requirements: Passport. If passing through British territory, however, British require visa to country of destination.

Steamships: To Bangkok: *Blue Funnel Line* (Brit), *Isthmian Line* (Amer).

Hotels: Bangkok: *Europe*, *Oriental*, *Rajdhani*, *Trocadero*.

AUSTRALIA

The northern two-thirds, in general, has mean monthly temperatures in January of 80, February 85, June 55 and July 75. The southern third for the same months, respectively, is about 80, 65, 55, 50. Inland temperatures are extreme and in central Australia shade temperatures may reach 110 and drop at night to zero. The heat, however, is dry and bearable. The southeastern section of the country is coolest, the northwestern hottest, the heat, as inland, dry. Summers in the north coastal parts are enervating from Mackay to Broome. Darwin, in the north, averages daily highs in the 90s most of the year. Sydney, in the southeast, and Melbourne, farther south, are similar in temperature, Sydney being slightly warmer and both averaging daily highs of 78 in January and February, the warmest months. Sydney and Melbourne average 59 and 55, respectively, as daily highs during July, the coldest month. South of Australia lies TASMANIA, an island, whose west coast is cooler and rainier than the east, averaging 40 inches of rain annually, 60 inches to 120 inches inland, most falling during the Australian winter. Hobart, Tasmania, averages a daily high of 71 during January and February, warmest months, and 52 during the coldest month, July. Snow falls normally only on the southeastern highlands of Australia and in Tasmania. In the north of Australia, rains occur chiefly during the hot season, November to April, averaging 60 inches or less annually. In the south, rains average 40 inches or less, falling mainly during the Australian winter. The northeast Queensland coast is the wettest section (144 inches to 165 inches annually), and the Lake Eyre district is driest (5 inches per year). Best traveling time: November to April.

Monetary unit: Australian pound. Coins used: crown; florin; shilling; pence (6, 3, 1, $\frac{1}{2}$). One pound equals 20 shillings; one florin equals 2 shillings; one shilling equals 12 pence.

Principal cities: *Adelaide*, *Brisbane*, *Canberra*, *Hobart* (Tasm.), *Melbourne*, *Newcastle*, *Perth*, *Sydney*.

Entry requirements: Passport, visa (issued by British consular officer), smallpox vaccination certificate, possession of round-trip ticket or transportation to country beyond granting entry.

Airlines: *BOAC*, *Ansett Airways, Ltd.*, *Australian National Airways, Ltd.*, *Carpenter Airlines*, *Tasman Empire Airways*, *Qantas Airways*.

Steamships: To Adelaide and Brisbane: *American Pioneer Line* (Amer), *Funch*, *Edye* (Brit), *Norton, Lilly Co.* (Brit). To Melbourne and Sydney: *American Pioneer Line*, *Funch*, *Edye Line*, *Matson Line* (Amer), *Norton, Lilly Co.*

Hotels: Adelaide: *Oriental*, *Richmond*, *South Australian*. Brisbane: *Bellevue*, *Gresham*, *Lennon's*. Canberra: *Canberra*. Melbourne: *Australia*, *Carlyon*, *Chevron*, *Menzies*, *Oriental*, *Scotts*, *Windsor*. Perth: *Adelphi*, *Esplanade*, *Palace*, *Savoy*. Sydney: *Australia*, *Burlington*, *Carlton*, *Metropole*, *Petty's*, *Sydney*, *Usher's*, *Wentworth*. Hobart: *Hadley's*.

January 26, Australia Day, and April 25, Anzac Day, are observed with parades, sports events. The Sydney Cup horse race is run in April. Royal Agricultural Shows are held during the Easter season in Sydney, in August at Brisbane, in September, at Adelaide and Melbourne and in October at Perth and Hobart, Tasmania. From June to August winter sports carnivals are held and during the Australian summer surf carnivals are held on the beaches. Deep-sea fishing, golf and tennis are available the year around, as well as horse racing, the country's most popular sport. Greatest race is the Melbourne Cup held the first Tuesday in November at the Flemington Racecourse a few miles from the heart of Melbourne. Cricket in summer and football in winter are very popular sports.

NEW ZEALAND

Temperatures from December to March average a daily high in the low 70s at

Auckland, the coldest average high being 57 in July. Wellington is usually about

° cooler and South Island remains about 10° cooler than Auckland the year around. Rainfall is moderate except on the west slopes and the South Alps where 100 inches usually fall in a year, mostly in the spring. Best traveling time: December to March.

Monetary unit: New Zealand pound. British coins used except for farthing.

Principal cities: Auckland, Christchurch, Dunedin, *Wellington*.

Entry requirements: Passport and visa issued by British consular officer).

Airlines: PAA (Auckland), Tasman Empire Airways, Union Airways.

HAWAIIAN ISLANDS

The largest inhabited islands, in order of size, are: Hawaii, Maui, Molokai, Lanai, Kahoolawe, Oahu, Kauai and Niihau. There are many lesser islands and the entire group is cooler than other places in the same latitude, has abundant sunshine, no tropical storms. At times, especially in the winter, a southerly wind known as the KONA blows, bringing mugginess and heavy rains. The windward slopes of the islands are cooler than the leeward and temperatures drop about 1° for every 300 feet in altitude. Honolulu, on Oahu, averages a daily high of 76 in January and February, the coolest months, with the daily high averaging 84 during August, the warmest month. There is no distinct rainy and dry season but usually the winter is rainier. There is wide variation in temperature, rainfall and wind for the neighborhood islands. In Honolulu, however, rainfall averages about 28 inches annually and the mean annual temperature is 74. Best traveling time: November to May.

Monetary unit: U. S. currency.

Steamships: To Auckland, Wellington: American and Australian Line (Brit), American Pioneer Line (Amer), Matson Line (Amer), Oceanic SS Co. (Amer), Union of New Zealand Line (Brit).

Hotels: Auckland: Central, Grand, Royal, Station, Star. Christchurch: United Service, Warners. Dunedin: Grand. Wellington: Grand, Waterloo.

Anzac Day is observed April 25 with military parades, services for the war dead. A Provincial Anniversary is held in each province, Auckland's being January 29 and Wellington's on January 22.

Principal city: *Honolulu*.

Entry requirements: None for U. S. citizens.

Airlines: PAA (Honolulu).

Steamships: To Honolulu: American President Lines (Amer), American Pioneer Line (Amer), Matson Line (Amer), Oceanic SS Co. (Amer).

Hotels: Honolulu: Alexander Young, Halekulani, Moana, Royal Hawaiian.

May 1 is Lei Day during which garlands and baskets of flowers are given as presents and worn by most of the islanders. Surfboard paddling races and other sports events are held June 11, anniversary of Kamehameha, former king of Hawaii. On Regatta Day, sometime in September, inter-island boy and girl crews race in Honolulu Harbor. Bathing, surf-boarding, yachting, polo, golf, tennis, riding, deep-sea and trout fishing, wild pig hunting and mountain climbing are year-around activities. In winter, skiing in the mountains is available.

PACIFIC ISLANDS

The thousands of islands in the vast Pacific almost defy handy classification and, as a rule, tourists will visit certain groups briefly on cruise ships, usually in conjunction with trips to farther destinations such as the Orient or Australia. Travelers desiring to go for prolonged stays to any particular island or group of islands are advised to see an American Express representative for full information regarding accommodations, sanitation, monsoon seasons, diseases, climate and various facilities that may or may not be found in any definite locale.

In the MARIANAS the main islands are Rota, Guam, Tinian and Saipan. The climate is damp but the heat is not as high as in the Philippines. Southward are the PALAU ISLANDS, chief of whose twenty-

six islands is Peleliu. The climate is subtropical. The NEW BRITAIN ARCHIPELAGO is tropical but breeze-tempered. Southeast are the SOLOMON ISLANDS which include Bougainville and Guadalcanal. Damp, debilitating, with heavy rains, the dry season is from December to May. South of the Solomons are the SANTA CRUZ ISLANDS, hot, moist, frequently stormy. Farther south are the NEW HEBRIDES, about forty mountainous islands and numerous islets, hot and damp, particularly from November to April. The LOUISIAD GROUP, southwest, includes New Caledonia and is cooler, healthier than the New Hebrides. Fifty to one hundred miles northeast of New Caledonia is the LOYALTY GROUP. North of the equator but widely scattered are the

CAROLINE ISLANDS whose four main islands are Ponape, Kusale, Truk and Yap. Climate is moist, subject to severe storms. Eastward are the MARSHALL ISLANDS, damp and with an 80° mean temperature. January is hottest, July coolest. The GILBERT AND ELLICE ISLANDS, slightly north of the equator and just west of the 180th meridian, are hot. Some fifteen degrees below the equator are the FIJI ISLANDS. From April to November, winds are steady and the climate is dry, cool. Then the weather becomes uncertain, wet, warm and from November to March frequent heavy gales occur and sometimes hurricanes. Rainfall is greater on the windward side of the islands—Suva has 110 inches annually—but the mean temperature is about the same, 80, sometimes below 50 in the hills. Climate from November to April is enervating to Americans but not unhealthy. About six hundred miles north-northeast of New Zealand lie the KERMADEC ISLANDS, largest of them being Raoul or Sunday Island. The TONGAN ARCHIPELAGO has at least one hundred islands and is southeast of the Fiji group. It is dry and cool compared to Samoa and Fiji, averaging 75 to 77 but higher in the wet season. April to December cool winds come but sometimes build to violent force. Annual rainfall is heavy. The SAMOAN ARCHIPELAGO is a chain of many island groups, moist, occasionally oppressive, but pleasant on the whole. Climate is best from April to September, wet from October to March. At Apia, the mean temperature annually is 78, the warmest days reaching 80 in December, the coldest 75 in July. Most important of the COOK ISLANDS is Rarotonga. The climate is tempered by oceanic influences but reefs make accessibility difficult. In

the SOCIETY ISLANDS is Tahiti and though seasons are not well-defined the heat is great, dampness excessive, but the climate is not unhealthy. The TUAMOTU or LOW ARCHIPELAGO consists of countless islands, climatically healthy, and with a lower mean temperature than Tahiti, but rains and fogs occur even in the dry season. November to March is stormy. The chief islands are Rangiroa, Fakarava, Hao, Anaa. PITCAIRN ISLAND lies about one hundred miles south of the nearest Tuamotu group, has a variable climate, is rainy. Outlying island groups include the Marquesas, Palmyra, Washington, Fanning and Christmas Islands, Easter Island and the separately treated Hawaiian Islands.

Monetary unit: Currency of controlling government accepted.

Principal cities: Apia, Samoa; Noumea, New Caledonia; Papeete, Tahiti; Suva, Fiji Islands.

Entry requirements: Regulations for islands and groups vary according to controlling government. In general, however, in addition to passport and visa, smallpox vaccination and yellow fever inoculation certificates are needed. For the Fijis, a cholera inoculation certificate is also required. Travelers are advised *always* to investigate conditions prior to departure.

Airlines: PAA (Canton Island, Guam, Wake, Midway Islands; Noumea, New Caledonia; Suva, Fiji Islands).

Steamships: To New Hebrides: Burns Philip Line (Brit.). To Papeete, Tahiti: Union SS Co. of New Zealand (Brit.). To Pago Pago, Samoa; Suva, Fiji Islands: Matson Line (Amer.).

Hotels: Guam, Midway, Wake Islands: PAA passengers accommodated at PAA hdq. Noumea: Grand Hotel du Pacifique.

Rate of Exchange*

Country	Currency	Exchange rate	Country	Currency	Exchange rate
Argentina	Peso	\$.2475	Italy	Lire	.0044
Belgium	Franc	.0228	Mexico	Peso	.2065
Bolivia	Boliviano	.0238	Norway	Florin	.3800
Brazil	Cruzirelo	.0550	Nicaragua	Cordoba	.2009
Chile	Peso	.0335	Netherlands	Krone	.2017
China	Chinese dol.	.0003	Palestine	Palestine £	4.0500
Colombia	Peso	.5900	Paraguay	Guarani	.3189
Costa Rica	Colon	.1800	Peru	Sol	.1550
Czechoslovakia	Koruna	.0200	Poland	Zloty	.0100
Denmark	Krone	.2086	Portugal	Escudo	.0407
Ecuador	Sucre	.0850	Rumania	Leu	.00006
Egypt	Egyptian £	4.1600	Spain	Peseta	.0612
El Salvador	Colon	.4000	Sweden	Krona	.2800
England	Pound ster.	4.0350	Switzerland	Swiss Franc	.2340
Finland	Markha	.0074	Turkey	Turkish £	.3571
France	Franc	.0084	Union of South Africa	S. A. £	4.0200
Greece	Drachma	.0002	Uruguay	Peso	.5650
Guatemala	Quetzal	1.0000	USSR	Rouble	.1880
Honduras	Lempira	.5000	Venezuela	Bolivar	.3010
Hungary	Florint	.0858	Yugoslavia	Dinar	.0199
India	Rupce	.3030			

*As of October 28, 1946.

Record Passages of Atlantic (Screw) Steamships

Source: "The Shipbuilder and Marine Engine-Builder"—October, 1936.
"Nautical Gazette"—February 16, 1935.

Prepared by United States Maritime Commission Division of Economics and Statistics,
August 22, 1946.

WESTWARD PASSAGES

Rate	Ship	Flag	To New York from	Time D. H. M.	Speed knots	Sea miles
867	CITY OF PARIS (Time record only)	British	Queenstown	8 4 1	.....	Not available
872	ADRIATIC	"	"	7 23 17	14.52	"
875	CITY OF BERLIN*	"	"	7 18 2	15.2	"
875	GERMANIC	"	"	7 11 37	15.75	"
877						
876	BRITANNIC	"	"	{	15.46	"
877				{ 7 10 53	.....	"
879	ARIZONA	"	"	7 8 12	.....	"
881						
882	ALASKA*	"	"	{	16.04	"
883				{ 6 21 40	.....	"
884	OREGON* (Guion)	"	"	6 10 9	.....	"
884	OREGON (Cunard)	"	"	6 9 42	18.16	"
887	UMBRIA	"	"	6 4 34	18.91	"
885	ETRURIA*	"	"	6 1 44	19.57	"
888						
889	CITY OF PARIS*	"	"	{	20.01	"
892				{ 5 14 24	20.7	"
890				{	20.17	"
891	TEUTONIC*	"	"	{ 5 16 31	20.35	"
891				{ 5 18 8	20.11	"
892	MAJESTIC*	"	"	{	20.41	"
893	CAMPANIA	"	"	5 9 6	.....	"
894	LUCANIA*	"	"	5 7 23	21.82	"
898	KAISER WILHELM DER GROSSE*	German	Southampton	{	22.07	"
900				{ 5 15 20	22.29	"
900	DEUTSCHLAND	"	"	5 11 54	23.15	3,044
901						
907	LUSITANIA*	British	Queenstown	{	24.00	Not available
910				{ 4 11 40	25.88	"
908	MAURETANIA*	"	"	4 10 41	26.06	"
911	"	"	Cherbourg	5 2 34	.....	"
924	"	"	"	4 21 44	26.9	3,162
929	BREMEN*	German	"	4 17 42	27.83	Not available
929	EUROPA*	"	"	4 17 6	27.91	3,157
933	REX*	Italian	Gibraltar	4 13 58	28.92	3,181
935	NORMANDIE*	French	Bishop's Rock	4 3 2	29.98	3,015
936				{ 4 0 27	30.14	2,939
936	QUEEN MARY*	British	"	{ 3 21 48	30.99	2,907
938						

Vessels which have held the Blue Riband.

The Great Lakes and their connecting waterways are the world's most important bit of inland waterway transportation. The total distance of the system, measured along the steamer track from Duluth, Minnesota, to the outlet of Lake Ontario, is 60 miles.

Egyptian ladies in the days of Cleopatra painted their lower eyelids green and the upper lids, lashes and eyebrows black. The palms of their hands and the soles of their feet were dyed with henna.—*Encyc. Brit.*

The Passionate Encyclopaedia Britannica Reader To His Love

By Maggie

As And to Aus, and Aus to Bis,
As Hus to Ita, and Ita to Kys;
As Pay to Pol, and Pol to Ree;
Ah, that is how you are to me!

As Bis to Cal, and Cal to Cha;
As Edw to Eva, and Eva to Fra;
As Ref to Sha, and Sha to Shu;
That is, I hope, how I'm to you.
—F. P. A.

Record Passages of Atlantic (Screw) Steamships

Source: "The Shipbuilder and Marine Engine-Builder"—October, 1936.
"Nautical Gazette"—February 16, 1935.

Prepared by United States Maritime Commission Division of Economics and Statistics,
August 22, 1946.

EASTWARD PASSAGES

Date	Ship	Flag	To New York from	Time D. H. M.	Speed knots	Sea miles
1852	GREAT BRITAIN	British	Liverpool	11 0 0	.....	Not available
1869	CITY OF BRUSSELS*	"	Queenstown	7 22 3	14.65	"
1873	BALTIC*	"	"	7 20 9	15.11	"
1875	CITY OF BERLIN*	"	"	7 15 28	15.37	"
1876	GERMANIC*	"	"	7 15 17	15.78	"
1876	BRITANNIC*	"	"	7 12 41	15.95	"
1879	ARIZONA*	"	"	7 8 0	15.95	"
1882	ALASKA*	"	"	6 18 37	.....	"
1883	OREGON (Guion)	"	"	6 16 57	.....	"
1884	AMERICA	"	"	6 14 8	17.8	"
1884	OREGON* (Cunard)	"	"	6 10 40	18.18	"
1885	ETRURIA*	"	"	6 4 54	19.41	"
1888	UMBRIA	"	"	6 3 12	.....	"
1889	CITY OF PARIS*	"	"	5 22 50	19.49	"
1891	TEUTONIC	"	"	5 21 3	19.78	"
1892	CITY OF NEW YORK	"	"	5 19 57	20.1	"
1893	CAMPANIA*	"	"	5 9 8	.....	"
1894	LUCANIA*	"	"	5 8 38	.....	"
1897	KAISER WILHELM DER GROSSE*	German	Southampton	5 15 25	22.51	"
1898	DEUTSCHLAND*	"	Eddystone Lt.	5 7 38	23.51	3,082
1900	KAISER WILHELM II*	"	Plymouth	5 8 16	23.58	Not available
1904	LUSITANIA*	British	Queenstown	4 15 50	25.57	"
1908	MAURETANIA*	"	"	4 13 41	25.89	"
1911	"	"	Cherbourg	5 1 49	26.25	3,198
1924	"	"	Plymouth	4 17 50	27.22	3,098
1929	BREMEN*	German	Cherbourg	4 14 30	27.91	3,084
1933	"	"	"	4 17 43	28.14	Not available
1933	"	"	"	4 16 15	28.51	3,199
1935	NORMANDIE*	French	Bishop's Rock	4 3 25	30.35	Not available
1937	"	"	"	4 .. 6	30.99	2,978
1936	QUEEN MARY*	British	"	3 23 57	30.63	Not available
1938	"	"	"	3 20 42	31.69	2,938

*Vessels which have held the Blue Riband.

From Rich Richard's Almanac

Too many cooks steal the broth, the milk, and whatever else is in the icebox.

Early to bed and early to rise,
And you'll never meet any Prominent Guys.

A hair on the head is worth two on the brush.

Better half a loaf than no vacation.

Garden hint: Take care of the peonies,
and the dahlias take care of themselves.

In summer when the nights are hot,

Work is a thing that I do not;

In fall, in winter, and in spring

I do not ever do a thing.

April

Whan that Aprille with his shoures swot
The drought of Merch hath perced to th
rote,

Than longen folk to hear the fieldes call
And gon to see yong men play games c
balle.

Vanisht is Winter with his chill and strife
Aprille ben swell month, thou betst th
life.

The Bible contains 3,566,480 letters, an
773,746 words. If this is wrong, count ther
yourself, and get a copy of the 1988 In
formation Please Almanac.—F. P. A.

CALENDAR AND ASTRONOMICAL SECTION



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ON USING THE CALENDAR PAGES

Sun fast and sun slow. This is the equation of time, as discussed in our section, Kinds of Time.

Sunrise and sunset. For accurate results, two corrections to the tabular values are necessary: (1) interpolation for latitude, and (2) reduction to standard time. When the observer is at a latitude between two given latitudes, he computes a time for sunrise or sunset that lies between the times shown for the given latitudes. (Our table of longitudes and latitudes is a guide for one's position, but a large atlas may be consulted.) For example, on Feb. 7, the sun rises at 7:04 at lat. 40° and at 7:14 at lat. 45° , the difference being 10^m . An observer at Fort Wayne, Ind. (lat. $41^\circ 4'$) would be about $1/5$ the distance between 40° and 45° . $(1/5)(10^m) = 2^m$; hence at Fort Wayne sunrise occurs at $7:04 + 2^m = 7:06$ A.M., L. C. T. [New York City is essentially $1/6$ the distance between 40° and 45° , Chicago about $2/5$ of the way, etc.]

In the sun and moon tables, the data has to be given in LOCAL CIVIL TIME. This is *not* standard time, but has to be reduced to standard time by the rule in Kinds of Time.

Moonrise and moonset. For accurate results at any station in the U. S., three corrections are needed: (1) interpolation for latitude, (2) correction for longitudes west of $82\frac{1}{2}^\circ$, and (3) reduction to standard time.

(1) Interpolation for latitude follows the same method as for the sun.

(2) Use of the *a-factor*. The moon tables are exact for the given latitudes and for longitude 75° W. The *a-factor* adapts them to any longitude in the U. S. For observers in the eastern states and as far west as long. $82\frac{1}{2}^\circ$ [Port Huron, Mich., Mansfield, O., Huntington, W. Va., Asheville, N. C., Tampa, Fla.], no *a-factor* is used. For stations in the 90° zone, between $82\frac{1}{2}^\circ$ and $97\frac{1}{2}^\circ$, use the *a-factor* in the column "90". The "*a-factor, moonrise*" is always to be added to the time of moonrise as derived from the main tables, and the "*a-factor, moonset*" is added to the time of moonset as derived. The boundary at $97\frac{1}{2}^\circ$, between the 90° and the 105° zones, runs through Grafton, N. D., Webster, S. D., Norfolk, Neb., Salina, Kan., Oklahoma City, Okla., Fort Worth and Corpus Christi, Tex.

Observers in the 105° zone, between $97\frac{1}{2}^\circ$ and $112\frac{1}{2}^\circ$ long., will use the " 105° *a-factor*," and those west of $112\frac{1}{2}^\circ$ will use the " 120° *a-factor*," the eastern boundary ($112\frac{1}{2}^\circ$) of the 120° zone going through Butte, Mont., Pocatello, Id., Panguitch, U. and Prescott, Ariz. These zones do *not* correspond to the irregular divisions of the standard-time belts.

(3) Change L.C.T. obtained, to standard time by the rule in Kinds of Time.

Example: find moonrise on Mar. 4, 1941 at Eugene, Ore. (long. $123^\circ 5'$ W., lat. 44° N.). (a) Moonrise time for 40° is 3:04 P.M. for 45° , 2:47 P.M.; difference is -17^m . Eugene is $4/5$ the difference from 40° to 45° hence $(4/5)(-17^m) = -13\frac{3}{5}^m$ or -14^m ; $3:04 - 14^m = 2:50$ P.M. (b) Add *a-factor* moonrise, for the 120° region: $2:50 + 9^m = 2:59$ P.M., L.C.T. (c) Reduce to standard time: $123^\circ - 120^\circ = 3^\circ$; hence Eugene is 3.1 W. of the standard meridian; $3.1(4^m) = 12^m.4$; $2:59$ P.M. $+ 12^m = 3:11$ P.M., P.S.T.

Moon's transit. This data indicates the local civil time of the moon crossing the observer's meridian. The time is the same for all latitudes. It is nearly correct for all longitudes in the U. S.; for more exact work use—for every day—a mean *a-factor* of 2^m , 4^m , 6^m . That is, for the 75° zone, use no correction; for the 90° zone add 2^m ; for the time in the tables; for the 105° zone add 4^m ; for the 120° zone add 6^m . Afterward, reduce the L.C.T. to standard time.

Tides. Inasmuch as the time of tide varies considerably from port to port, even over short distances, it is impossible to offer tidal data covering a coast adequately. We give the times of high and low water for one Atlantic and one Pacific port, standard time. For a few other selected ports we give corrections to be applied to the main tide tables. For example, on a day the times of high and low tides at Boston, Mass., occur, on the average, about $2^h 45^m$ later than the corresponding times for New York, so the $2^h 45^m$ is a constant correction to be added to the New York data for Boston. For tides at Santa Cruz, Cal., subtract $1^h 10^m$ from the time of tide for San Francisco. Tide corrections at a time in main tide tables furnished by U. S. Coast and Geodetic Survey, Washington, D. C. Complete tidal data for all ports of both oceans available at U.S.C.G.S.

Time-corrections to be Applied to Tides

With respect to New York (the Battery)

	h	m		h	m
Eastport, Me.	add	2 25	Baltimore, Md.	add	11 0
Portland, Me.	add	2 35	Newport News, Va.	add	1 5
Portsmouth, N. H.	add	2 55	Wilmington, N. C.	add	2 15
Boston, Mass.	add	2 45	Charleston, S. C.	sub.	0 30
New Haven, Conn.	add	2 50	St. Augustine, Fla.	add	0 20
New Rochelle, N. Y.	add	2 55	Daytona Beach (ocean), Fla.	sub.	0 40
Long Island, N. Y.	sub.	0 50	Palm Beach (ocean), Fla.	sub.	0 35
Longbury Park, N. J.	sub.	1 0	Miami Beach (ocean), Fla.	sub.	0 15
Atlantic City, N. J.	sub.	1 5	Key West, Fla.	add	1 35

With respect to San Francisco (Golden Gate)

	h	m		h	m
Sequoia, Wash.	add	1 45	Gold Beach, Ore.	add	0 15
Astoria, Ore.	add	1 35	Eureka, Cal.	add	0 55
Newport, Ore.	add	0 40	Santa Cruz, Cal.	sub.	1 10

Kinds of Time

Of the three main kinds of time (sidereal, apparent solar, and mean solar), the two kinds used in our calendar pages (local civil and standard time) are both types of mean solar time.

Sidereal time is used mostly in astronomy. It is nearly but not exactly star-time, and is measured by the diurnal rotation of the vernal equinox point in the sky. Sidereal days are shorter than solar days by about 3^m 56^s of mean time.

Apparent solar time is measured by the apparent diurnal rotation of the sun, and the hour-angle of the sun +12^h. When the sun is at lower transit we have 0^h by apparent time; when it is on the upper meridian the apparent time is 12^h. The sun is not a good timekeeper, its eastward motion along the ecliptic being somewhat irregular, so apparent days are of unequal duration.

Mean solar time is the hour-angle of the mean sun +12^h. The mean sun is an imaginary body moving uniformly along the celestial equator. When the mean sun is on the lower meridian, the mean time is 0^h. The actual sun is sometimes ahead of and sometimes behind the mean sun, and the difference at any moment is the *equation of time*. When the sun is west of the mean sun, we have the "sun fast" situation, and the sun crosses the meridian before the mean sun; when the sun is east

of the mean sun, we have the "sun slow" condition, and the sun transits after the mean sun. The equation of time helps in conversion of apparent and mean solar time. No clock runs on apparent time but ordinary clocks keep mean solar time in some form.

Local civil time (L.C.T.) is the mean solar time of a designated meridian, and its day begins with the mean sun at lower transit. This is midnight, the moment of *zero hour* (0^h). Ordinary clocks are not set to local civil time, because this time—at any instant—varies with any change of longitude.

Standard time is the local civil time of a standard meridian, but used over an entire time-zone. In the U. S. the four zones (Eastern, Central, Mountain, and Pacific) are based upon the standard meridians of 75°, 90°, 105°, and 120° respectively. Ordinary clocks run on standard time, a type of mean solar time. In the summer, in certain localities, they run on advanced time (as daylight saving time) but this is only a clock-setting, and is actually standard time. Daylight saving time for a certain zone is the normal standard time of one zone to the east. While popular in certain metropolitan areas, it is not used for scientific observations. Advanced time is 1^h later on the clock-face than the normal standard time of the same zone.

To reduce local civil time to standard time, decrease the L.C.T. by 4^m for every degree the station is east of the standard meridian, or increase the L.C.T. by 4^m for every degree the station is west of the standard meridian.

JANUARY, 1947

A.M. in Light Figures; P.M. in Bold

Jan.	Sun slow	Local Civil Time				Local Civil Time				Local Civil Time							
		Latitude 30°				Latitude 35°				Latitude 40°							
		a- factor moonrise			Sun- rise	Sun- set	Moon- rise	Moon- set	Sun- rise	Sun- set	Moon- rise	Moon- set	Sun- rise	Sun- set	Moon- rise	Moon- set	
		90°	105°	120°													
	m s	m	m	m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m
1 Wed.	3 14	1	2	3	6 56	5 11	12 45	0 44	7 8	4 59	12 42	0 46	7 22	4 45	12 38	0 48	
2 Thu.	3 43	1	3	4	6 56	5 12	1 20	1 47	7 8	5 0	1 14	1 51	7 22	4 46	1 7	1 57	
3 Fri.	4 11	2	3	5	6 56	5 12	2 1	2 52	7 8	5 0	1 52	3 1	7 22	4 46	1 41	3 10	
4 Sat.	4 38	2	4	6	6 57	5 13	2 48	4 2	7 9	5 1	2 36	4 13	7 22	4 47	2 22	4 26	
5 Sun.	5 6	2	5	7	6 57	5 14	3 43	5 13	7 9	5 2	3 29	5 27	7 22	4 48	3 13	5 42	
6 Mon.	5 33	3	6	9	6 57	5 14	4 46	6 24	7 9	5 3	4 32	6 38	7 22	4 49	4 15	6 55	
7 Tue.	5 59	3	6	9	6 57	5 15	5 56	7 29	7 9	5 4	5 42	7 43	7 22	4 50	5 26	8 0	
8 Wed.	6 25	3	6	9	6 57	5 16	7 7	8 26	7 9	5 4	6 55	8 39	7 22	4 51	6 41	8 53	
9 Thu.	6 50	3	6	9	6 57	5 17	8 16	9 15	7 9	5 5	8 7	9 25	7 22	4 52	7 56	9 36	
10 Fri.	7 15	3	6	9	6 57	5 18	9 21	9 56	7 9	5 6	9 16	10 3	7 22	4 53	9 8	10 11	
11 Sat.	7 40	3	5	8	6 57	5 18	10 23	10 32	7 9	5 7	10 21	10 36	7 22	4 54	10 17	10 41	
12 Sun.	8 4	3	5	8	6 57	5 19	11 22	11 4	7 9	5 8	11 22	11 6	7 22	4 55	11 22	11 7	
13 Mon.	8 27	3	5	8	6 57	5 20	.....	11 34	7 8	5 9	.....	11 33	7 21	4 56	.....	11 31
14 Tue.	8 50	3	5	8	6 57	5 21	0 19	12 4	7 8	5 10	0 22	12 1	7 21	4 57	0 25	11 55	
15 Wed.	9 12	3	5	8	6 57	5 22	1 14	12 36	7 8	5 11	1 20	12 29	7 21	4 58	1 27	12 21	
16 Thu.	9 33	3	5	8	6 57	5 23	2 9	1 8	7 8	5 12	2 18	12 59	7 20	4 59	2 28	12 48	
17 Fri.	9 54	3	5	7	6 57	5 24	3 5	1 45	7 8	5 13	3 16	1 31	7 20	5 0	3 28	1 20	
18 Sat.	10 14	2	5	7	6 56	5 24	4 0	2 25	7 7	5 14	4 13	2 12	7 19	5 2	4 28	1 57	
19 Sun.	10 33	2	4	7	6 56	5 25	4 55	3 10	7 7	5 15	5 9	2 55	7 19	5 3	5 25	2 39	
20 Mon.	10 52	2	4	6	6 56	5 26	5 47	3 59	7 6	5 16	6 1	3 44	7 18	5 4	6 18	3 27	
21 Tue.	11 10	2	4	5	6 56	5 27	6 36	4 52	7 6	5 17	6 50	4 39	7 18	5 5	7 7	4 22	
22 Wed.	11 27	2	3	5	6 56	5 28	7 21	5 48	7 6	5 18	7 33	5 36	7 17	5 6	7 49	5 22	
23 Thu.	11 44	1	3	4	6 55	5 29	8 1	6 46	7 5	5 19	8 12	6 35	7 17	5 7	8 25	6 23	
24 Fri.	11 59	1	2	3	6 55	5 30	8 38	7 43	7 5	5 20	8 47	7 35	7 16	5 8	8 57	7 27	
25 Sat.	12 14	1	2	3	6 54	5 30	9 12	8 41	7 4	5 21	9 18	8 36	7 15	5 10	9 25	8 30	
26 Sun.	12 28	1	2	3	6 54	5 31	9 43	9 38	7 4	5 22	9 47	9 37	7 15	5 11	9 51	9 34	
27 Mon.	12 41	1	2	3	6 54	5 32	10 14	10 37	7 3	5 23	10 15	10 38	7 14	5 12	10 15	10 39	
28 Tue.	12 54	1	2	3	6 53	5 33	10 46	11 37	7 2	5 24	10 43	11 41	7 13	5 13	10 40	11 45	
29 Wed.	13 5	1	2	4	6 53	5 34	11 18	.....	7 2	5 25	11 14	.....	7 12	5 14	11 7	.....
30 Thu.	13 16	1	3	4	6 52	5 35	11 56	0 40	7 1	5 26	11 47	0 46	7 12	5 16	11 38	0 55	
31 Fri.	13 26	2	3	5	6 52	5 36	12 38	1 45	7 0	5 27	12 27	1 55	7 11	5 17	12 15	2 6	

Standard Time of Moon's Phases, January 1947

	Eastern			Central			Mountain			Pacific		
	d	h	m	d	h	m	d	h	m	d	h	m
Full Moon	6	11	47 p.m.	6	10	47 p.m.	6	9	47 p.m.	6	8	47 p.m.
Last Quarter	13	9	56 p.m.	13	8	56 p.m.	13	7	56 p.m.	13	6	56 p.m.
New Moon	22	3	34 a.m.	22	2	34 a.m.	22	1	34 a.m.	22	0	34 a.m.
First Quarter	29	7	7 p.m.	29	6	7 p.m.	29	5	7 p.m.	29	4	7 p.m.

The temperature on the planet Mercury, on the side toward the sun, and when in perihelion, has been measured as approximately 412° C or 773° F.

JANUARY, 1947

A.M. in Light Figures; P.M. in Bold

Jan.	a-factor moonset			Local Civil Time				Eastern Standard Time Tides New York, N. Y. (The Battery)				Pacific Standard Time Tides San Francisco, Cal. (Golden Gate)				Local Civil Time
				Latitude 45°												Moon's upper transit
	90°	105°	120°	Sun- rise	Sun- set	Moon- rise	Moon- set	High	Low	High	Low	High	Low	High	Low	
	m	m	m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m
1	3	6	8	7 38	4 28	12 34	0 50	2 18	9 10	2 30	9 23	6 17	12 51	7 6	.....	7 11
2	3	6	9	7 39	4 29	12 59	2 4	3 19	10 12	3 38	10 18	6 55	0 4	8 28	1 51	8 2
3	3	6	9	7 39	4 30	1 28	3 21	4 24	11 11	4 49	11 13	7 37	0 56	9 38	2 47	8 57
4	3	6	10	7 39	4 31	2 6	4 41	5 25	12 7	5 54	.....	8 22	1 55	10 36	3 37	9 57
5	3	6	9	7 38	4 32	2 54	6 1	6 23	0 8	6 53	1 3	9 8	2 49	11 32	4 27	11 2
6	3	6	8	7 38	4 33	3 55	7 15	7 17	1 5	7 47	1 56	9 58	3 43	.....	5 15	.....
7	2	5	7	7 38	4 34	5 6	8 19	8 10	1 59	8 42	2 48	0 23	4 39	10 47	6 3	0 9
8	2	4	6	7 38	4 35	6 25	9 10	9 4	2 53	9 40	3 38	1 12	5 34	11 38	6 51	1 14
9	2	3	4	7 38	4 36	7 44	9 50	10 0	3 45	10 39	4 26	1 59	6 32	12 31	7 37	2 14
10	1	2	4	7 38	4 38	9 1	10 20	10 57	4 36	11 35	5 15	2 46	7 36	1 27	8 24	3 10
11	1	2	3	7 37	4 39	10 13	10 46	11 52	5 30	.....	6 7	3 33	8 43	2 29	9 8	4 1
12	1	2	3	7 37	4 40	11 22	11 8	0 29	6 28	12 44	7 2	4 19	9 57	3 40	9 53	4 47
13	1	2	3	7 36	4 41	.....	11 29	1 19	7 32	1 34	8 0	5 3	11 18	5 2	10 39	5 32
14	1	2	3	7 36	4 42	0 29	11 50	2 11	8 38	2 25	8 57	5 46	12 31	6 28	11 29	6 15
15	1	2	3	7 36	4 43	1 35	12 12	3 3	9 37	3 20	9 50	6 28	1 35	7 47	.....	6 58
16	1	3	4	7 35	4 45	2 39	12 37	3 58	10 31	4 18	10 38	7 11	0 20	9 0	2 27	7 41
17	1	3	4	7 34	4 46	3 43	1 5	4 52	11 20	5 14	11 25	7 52	1 13	9 59	3 12	8 27
18	2	3	5	7 34	4 47	4 45	1 38	5 42	12 8	6 4	.....	8 33	2 8	10 46	3 51	9 14
19	2	4	6	7 33	4 49	5 45	2 19	6 28	0 11	6 52	12 55	9 12	2 57	11 31	4 27	10 3
20	2	4	7	7 32	4 50	6 39	3 7	7 8	0 56	7 35	1 40	9 50	3 38	.....	5 0	10 53
21	2	5	7	7 32	4 51	7 26	4 3	7 46	1 40	8 15	2 23	0 8	4 20	10 21	5 35	11 43
22	3	5	8	7 31	4 52	8 6	5 5	8 24	2 21	8 54	3 1	0 46	4 56	10 55	6 7	12 33
23	3	5	8	7 30	4 54	8 40	6 10	8 59	2 59	9 31	3 38	1 21	5 33	11 31	6 40	1 22
24	3	5	8	7 29	4 55	9 8	7 16	9 34	3 35	10 10	4 12	1 55	6 15	12 6	7 13	2 8
25	3	5	8	7 28	4 57	9 33	8 23	10 9	4 7	10 46	4 42	2 24	7 1	12 49	7 46	2 53
26	3	5	8	7 28	4 58	9 55	9 31	10 47	4 41	11 25	5 13	2 55	7 54	1 39	8 20	3 38
27	3	5	8	7 27	4 59	10 16	10 40	11 29	5 18	.....	5 46	3 23	8 55	2 40	8 69	4 22
28	3	6	9	7 26	5 1	10 38	11 51	0 6	6 5	12 15	6 28	3 56	10 1	3 56	9 41	5 7
29	3	6	9	7 25	5 2	11 0	.....	0 53	7 17	1 5	7 31	4 32	11 13	5 32	10 30	5 55
30	3	6	9	7 24	5 4	11 27	1 4	1 46	8 41	2 4	8 48	5 19	12 23	7 8	11 26	6 46
31	3	6	9	7 22	5 5	11 59	2 20	2 50	9 52	3 15	9 56	6 9	1 29	8 30	.....	7 42

Morning and Evening Stars, January 1947

Morning stars: MERCURY, to Jan. 23. VENUS, in Ophiuchus, north of Antares, Jan. 15. MARS, beginning Jan. 6. JUPITER, in Libra. SATURN, to Jan. 26.

Evening stars: MERCURY, beginning Jan. 23. MARS, to Jan. 6. SATURN, beginning Jan. 26.
On meridian Jan. 29, at 0^h a.m., L.C.T.

Of Jupiter's 11 moons, the 4 discovered by Galileo are as large as or larger than our moon; but the others are considerably smaller, being mostly but a few miles in diameter. The 5th satellite is 112,600 miles from the primary, the 9th nearly 15,000,000 miles away.

FEBRUARY, 1947

A.M. in Light Figures; P.M. in Bold

Feb.	Sun slow	a- factor moonrise			Local Civil Time				Local Civil Time				Local Civil Time			
		90°105°120°			Sun- rise	Sun- set	Moon- rise	Moon- set	Sun- rise	Sun- set	Moon- rise	Moon- set	Sun- rise	Sun- set	Moon- rise	Moon- set
1 Sat.	m s	m	m	m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m
2 Sun.	13 35	2	4	6	6 51	5 36	1 27	2 53	7 0	5 28	1 14	3 6	7 10	5 18	12 59	3 20
3 Mon.	13 43	3	5	8	6 50	5 37	2 24	4 2	6 59	5 29	2 10	4 16	7 9	5 19	1 53	4 32
4 Tue.	13 51	3	6	9	6 50	5 38	3 30	5 8	6 58	5 30	3 16	5 23	7 8	5 20	2 59	5 39
5 Wed.	13 57	3	6	9	6 49	5 39	4 40	6 8	6 58	5 31	4 28	6 22	7 7	5 22	4 12	6 37
	14 3	3	6	9	6 49	5 40	5 51	7 1	6 57	5 32	5 40	7 12	7 6	5 23	5 28	7 26
6 Thu.	14 8	3	6	9	6 48	5 41	7 0	7 46	6 56	5 33	6 51	7 55	7 5	5 24	6 43	8 5
7 Fri.	14 12	3	6	9	6 47	5 42	8 5	8 25	6 55	5 34	8 0	8 31	7 4	5 25	7 55	8 37
8 Sat.	14 15	3	6	8	6 47	5 42	9 6	9 0	6 54	5 35	9 5	9 2	7 3	5 26	9 4	9 5
9 Sun.	14 18	3	5	8	6 46	5 43	10 6	9 32	6 53	5 36	10 8	9 32	7 2	5 28	10 10	9 31
10 Mon.	14 20	3	5	8	6 45	5 44	11 4	10 3	6 52	5 37	11 8	10 0	7 0	5 29	11 14	9 56
11 Tue.	14 21	3	5	8	6 44	5 45	.....	10 35	6 51	5 38	.....	10 28	6 59	5 30	.....	10 21
12 Wed.	14 21	3	5	8	6 44	5 46	0 1	11 7	6 50	5 39	0 8	10 59	6 58	5 31	0 17	10 48
13 Thu.	14 21	3	5	8	6 43	5 46	0 57	11 43	6 49	5 40	1 7	11 31	6 57	5 32	1 19	11 19
14 Fri.	14 19	2	5	7	6 42	5 47	1 53	12 21	6 48	5 41	2 5	12 9	6 56	5 34	2 19	11 54
15 Sat.	14 17	2	5	7	6 41	5 48	2 48	1 5	6 47	5 42	3 1	12 51	6 54	5 35	3 18	12 34
16 Sun.	14 15	2	4	6	6 40	5 49	3 41	1 53	6 46	5 43	3 56	1 38	6 53	5 36	4 13	1 21
17 Mon.	14 11	2	4	6	6 39	5 50	4 31	2 44	6 45	5 44	4 46	2 31	6 52	5 37	5 2	2 14
18 Tue.	14 7	2	3	5	6 38	5 50	5 18	3 40	6 44	5 45	5 31	8 27	6 51	5 38	5 46	3 12
19 Wed.	14 2	1	3	4	6 37	5 51	5 59	4 37	6 43	5 46	6 12	4 26	6 49	5 40	6 25	4 13
20 Thu.	13 57	1	2	4	6 36	5 52	6 37	5 36	6 42	5 47	6 48	5 27	6 48	5 41	6 58	5 17
21 Fri.	13 51	1	2	3	6 36	5 53	7 13	6 34	6 41	5 48	7 19	6 29	6 47	5 42	7 28	6 22
22 Sat.	13 44	1	2	3	6 35	5 53	7 45	7 32	6 40	5 48	7 49	7 30	6 45	5 43	7 54	7 27
23 Sun.	13 37	1	2	3	6 34	5 54	8 16	8 31	6 38	5 49	8 18	8 32	6 44	5 44	8 19	8 32
24 Mon.	13 29	1	2	3	6 33	5 55	8 48	9 32	6 37	5 50	8 46	9 35	6 42	5 45	8 44	9 38
25 Tue.	13 20	1	2	3	6 32	5 56	9 20	10 33	6 36	5 51	9 16	10 40	6 41	5 46	9 11	10 47
26 Wed.	13 11	1	3	4	6 30	5 56	9 56	11 38	6 35	5 52	9 48	11 46	6 40	5 47	9 40	11 57
27 Thu.	13 1	2	3	5	6 29	5 57	10 35	.....	6 34	5 53	10 25	.....	6 38	5 49	10 13	.....
28 Fri.	12 50	2	4	6	6 28	5 58	11 21	0 43	6 32	5 54	11 8	0 55	6 37	5 50	10 54	1 9

Standard Time of Moon's Phases, February 1947

	Eastern			Central			Mountain			Pacific		
	d	h	m	d	h	m	d	h	m	d	h	m
Full Moon.....	5	10	50 a.m.	5	9	50 a.m.	5	8	50 a.m.	5	7	50 a.m.
Last Quarter.....	12	4	58 p.m.	12	3	58 p.m.	12	2	58 p.m.	12	1	58 p.m.
New Moon.....	20	9	0 p.m.	20	8	0 p.m.	20	7	0 p.m.	20	6	0 p.m.
First Quarter.....	28	4	12 a.m.	28	3	12 a.m.	28	2	12 a.m.	28	1	12 a.m.

The finest star cluster visible to northern observers is the great globular cluster *Messier 13* in Hercules. In a telescope of 12 inches or larger aperture *M 13*, composed of myriads of stars, is of entrancing beauty. 50,000 stars have been counted in photographs of the cluster and these represent only the brightest stars. It is believed that altogether it may contain 1,000,000 stars. Its distance is about 31,000 light-years.

FEBRUARY, 1947

A.M. in Light Figures; P.M. in Bold

			Local Civil Time				Eastern Standard Time				Pacific Standard Time				Local Civil Time		
			Latitude 45°				Tides New York, N. Y. (The Battery)				Tides San Francisco, Cal. (Golden Gate)						
			Sun-rise	Sun-set	Moon-rise	Moon-set	High	Low	High	Low	High	Low	High	Low		Moon's upper transit	
No.	a-factor moonset																
	90°	105°	120°														
	m	m	m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m		
3	6	9	7 21	5 6	12 41	3 37	4 0	10 53	4 32	10 56	7 5	0 30	9 36	2 29	8 42		
3	6	9	7 20	5 8	1 34	4 52	5 10	11 51	5 42	11 56	8 1	1 35	10 29	3 24	9 46		
3	5	7	7 19	5 9	2 38	5 59	6 12	12 47	6 42	.....	8 58	2 39	11 17	4 15	10 51	
2	4	6	7 18	5 11	3 54	6 56	7 7	0 53	7 36	1 40	9 52	3 38	.....	5 2	11 54	
2	3	5	7 17	5 12	5 14	7 41	8 0	1 48	8 29	2 30	0 0	4 35	10 45	5 46	.....	
1	3	4	7 15	5 14	6 33	8 16	8 50	2 40	9 21	3 17	0 41	5 29	11 37	6 27	0 52		
1	2	4	7 14	5 15	7 49	8 44	9 42	3 30	10 13	4 2	1 22	6 23	12 29	7 9	1 46		
1	2	3	7 13	5 16	9 3	9 9	10 33	4 18	11 5	4 46	2 2	7 20	1 25	7 47	2 35		
1	2	3	7 11	5 18	10 12	9 30	11 23	5 5	11 55	5 30	2 41	8 18	2 23	8 25	3 23		
1	2	3	7 10	5 19	11 12	9 52	12 12	5 55	.....	6 18	3 20	9 21	3 29	9 5	4 8	
1	2	3	7 9	5 21	.....	10 14	0 42	6 53	12 59	7 11	4 0	10 29	4 49	9 46	4 52	
1	2	4	7 7	5 22	0 28	10 37	1 30	7 56	1 47	8 12	4 44	11 39	6 12	10 36	5 36		
1	3	4	7 6	5 24	1 32	11 4	2 20	9 0	2 39	9 11	5 32	12 45	7 35	11 39	6 22		
2	3	5	7 4	5 25	2 36	11 36	3 13	9 58	3 38	10 6	6 24	1 46	8 43	.....	7 8	
2	4	6	7 3	5 26	3 37	12 14	4 11	10 51	4 42	10 57	7 17	0 45	9 37	2 36	7 57		
2	4	6	7 1	5 28	4 33	1 1	5 8	11 40	5 40	11 45	8 7	1 50	10 20	3 19	8 47		
2	5	7	7 0	5 29	5 22	2 53	5 59	12 27	6 29	.....	8 51	2 43	10 58	3 57	9 37	
3	5	8	6 58	5 31	6 6	2 53	6 42	0 32	7 12	1 12	9 33	3 26	11 33	4 32	10 27		
3	5	8	6 57	5 32	6 41	3 58	7 23	1 17	7 50	1 54	10 10	4 6	.....	5 4	11 17	
3	5	8	6 55	5 34	7 11	5 5	8 0	1 59	8 26	2 33	0 3	4 42	10 47	5 35	12 4		
3	5	8	6 54	5 35	7 37	6 13	8 36	2 38	9 0	3 8	0 32	5 20	11 25	6 6	12 51		
3	5	8	6 52	5 36	8 0	7 22	9 10	3 15	9 33	3 41	0 57	6 0	12 5	6 37	1 36		
3	5	8	6 50	5 38	8 21	8 32	9 45	3 50	10 9	4 12	1 22	6 45	12 51	7 9	2 20		
3	6	8	6 48	5 39	8 43	9 43	10 24	4 25	10 49	4 42	1 47	7 35	1 46	7 42	3 6		
3	6	9	6 47	5 40	9 5	10 55	11 8	5 3	11 36	5 15	2 18	8 29	2 48	8 20	3 53		
3	6	9	6 45	5 42	9 30	.....	11 57	5 51	.....	5 55	2 48	9 31	4 9	9 4	4 42
3	6	9	6 44	5 43	9 59	0 10	0 27	6 57	12 52	6 57	3 33	10 41	5 45	9 57	5 36		
3	6	9	6 42	5 44	10 36	1 26	1 26	8 22	1 55	8 27	4 27	11 56	7 16	11 5	6 33		

Morning and Evening Stars, February 1947

Morning stars: VENUS. In Sagittarius, Feb. 15. MARS. Near the sun, morning sky. JUPITER. In Libra. On meridian Feb. 15 at 6 a.m., L.C.T.

Evening stars: MERCURY. Eastern elongation, Feb. 21. SATURN. In Cancer. On meridian Feb. 11 at 11 p.m., L.C.T.

The four largest asteroids or minor planets in order of size are Ceres, Pallas, Vesta, and Ceres, the largest, is about 480 miles in diameter, Pallas 300. Vesta, while not the brightest of all, barely attaining at times naked-eye visibility, under ideal conditions of observing. At certain times Vesta can be observed with binoculars and followed for months in its apparent course among the stars. A 5-inch telescope exhibits orange or pinkish color of the small planet.

MARCH, 1947

A.M. in Light Figures; P.M. in Bold

Mar.	Sun slow	a- factor moonrise				Local Civil Time				Local Civil Time				Local Civil Time			
		90°105°120°			Sun- rise	Sun- set	Moon- rise	Moon- set	Sun- rise	Sun- set	Moon- rise	Moon- set	Sun- rise	Sun- set	Moon- rise	Moon- set	
1 Sat.	12 39	2	5	7	6 27	5 58	12 13	1 50	6 31	5 55	12 0	2 4	6 35	5 51	11 43	2 2	
2 Sun.	12 28	3	5	8	6 26	5 59	1 14	2 55	6 30	5 56	1 0	3 11	6 34	5 52	12 43	3 2	
3 Mon.	12 16	3	6	9	6 25	6 0	2 20	3 56	6 28	5 56	2 7	4 10	6 32	5 53	1 50	4 2	
4 Tue.	12 3	3	6	9	6 24	6 0	3 29	4 50	6 27	5 57	3 17	5 3	6 31	5 54	3 4	5 1	
5 Wed.	11 50	3	6	9	6 23	6 1	4 38	5 37	6 26	5 58	4 29	5 47	6 29	5 55	4 18	5 1	
6 Thu.	11 36	3	6	9	6 22	6 2	5 44	6 18	6 25	5 59	5 38	6 25	6 28	5 56	5 32	6 1	
7 Fri.	11 22	3	6	9	6 21	6 3	6 43	6 54	6 23	6 0	6 46	6 58	6 26	5 57	6 42	7 1	
8 Sat.	11 8	3	5	8	6 20	6 3	7 49	7 28	6 22	6 1	7 50	7 29	6 25	5 58	7 51	7 1	
9 Sun.	10 53	3	5	8	6 18	6 4	8 48	7 59	6 20	6 2	8 53	7 57	6 23	5 59	8 56	7 1	
10 Mon.	10 38	3	5	8	6 17	6 4	9 47	8 31	6 19	6 2	9 54	8 26	6 21	6 0	10 1	8 1	
11 Tue.	10 23	3	5	8	6 16	6 5	10 45	9 3	6 18	6 3	10 54	8 56	6 20	6 1	11 5	8 1	
12 Wed.	10 7	3	5	7	6 15	6 6	11 43	9 38	6 16	6 4	11 54	9 28	6 18	6 2	.....	9 1
13 Thu.	9 51	3	5	7	6 14	6 6	.....	10 16	6 15	6 5	.....	10 4	6 17	6 4	0 7	9 1
14 Fri.	9 34	2	5	7	6 13	6 7	0 38	10 58	6 14	6 6	0 52	10 44	6 15	6 5	1 7	10 1	
15 Sat.	9 18	2	4	7	6 11	6 8	1 33	11 44	6 12	6 7	1 47	11 29	6 14	6 6	2 4	11 1	
16 Sun.	9 1	2	4	6	6 10	6 8	2 25	12 35	6 11	6 8	2 39	12 20	6 12	6 7	2 57	12 1	
17 Mon.	8 44	2	3	5	6 9	6 9	3 12	1 29	6 10	6 8	3 26	1 15	6 10	6 8	3 43	12 1	
18 Tue.	8 27	2	3	4	6 8	6 10	3 56	2 26	6 8	6 9	4 9	2 14	6 9	6 9	4 23	2 1	
19 Wed.	8 9	1	3	4	6 7	6 10	4 35	3 24	6 7	6 10	4 46	3 15	6 7	6 10	4 58	3 1	
20 Thu.	7 51	1	2	3	6 5	6 11	5 11	4 22	6 5	6 11	5 19	4 16	6 6	6 11	5 29	4 1	
21 Fri.	7 34	1	2	3	6 4	6 11	5 45	5 22	6 4	6 12	5 50	5 18	6 4	6 12	5 56	5 1	
22 Sat.	7 16	1	2	3	6 3	6 12	6 16	6 22	6 3	6 12	6 19	6 21	6 2	6 13	6 22	6 1	
23 Sun.	6 58	1	2	3	6 2	6 13	6 48	7 23	6 1	6 13	6 48	7 25	6 1	6 14	6 47	7 1	
24 Mon.	6 40	1	2	3	6 0	6 13	7 20	8 25	6 0	6 14	7 17	8 30	5 59	6 15	7 13	8 1	
25 Tue.	6 22	1	3	4	5 59	6 14	7 56	9 30	5 58	6 15	7 49	9 38	5 57	6 16	7 41	9 1	
26 Wed.	6 3	2	3	5	5 58	6 14	8 34	10 36	5 57	6 16	8 24	10 48	5 56	6 17	8 14	11 1	
27 Thu.	5 45	2	4	6	5 57	6 15	9 18	11 44	5 56	6 16	9 6	11 57	5 54	6 18	8 52	11 1	
28 Fri.	5 27	2	4	7	5 56	6 16	10 10	.....	5 54	6 17	9 55	.....	5 52	6 19	9 39	12 1
29 Sat.	5 9	3	5	8	5 54	6 16	11 7	0 49	5 53	6 18	10 52	1 4	5 51	6 20	10 34	1 1	
30 Sun.	4 50	3	6	9	5 53	6 17	12 10	1 51	5 51	6 19	11 55	2 5	5 49	6 21	11 39	2 1	
31 Mon.	4 32	3	6	9	5 52	6 18	1 16	2 45	5 50	6 20	1 4	2 59	5 48	6 22	12 49	3 1	

Standard Time of Moon's Phases, March 1947

	Eastern		Central		Mountain		Pacific	
	d	h m	d	h m	d	h m	d	h m
Full Moon.....	6	10 15 p.m.	6	9 15 p.m.	6	8 15 p.m.	6	7 15 p.m.
Last Quarter.....	14	1 28 p.m.	14	12 28 p.m.	14	11 28 a.m.	14	10 28 a.m.
New Moon.....	22	11 34 a.m.	22	10 34 a.m.	22	9 34 a.m.	22	8 34 a.m.
First Quarter.....	29	11 15 a.m.	29	10 15 a.m.	29	9 15 a.m.	29	8 15 a.m.

At present the length of the ordinary or tropical year is decreasing by 0^s.0053 per year but in the course of time it will increase again.

MARCH, 1947

A.M. in Light Figures; P.M. in Bold

				Local Civil Time				Eastern Standard Time				Pacific Standard Time				Local Civil Time
				Latitude 45°				New York, N. Y. (The Battery)				San Francisco, Cal. (Golden Gate)				
	a-factor moonset			Sun-rise	Sun-set	Moon-rise	Moon-set	High	Low	High	Low	High	Low	High	Low	Moon's upper transit
	90°	105°	120°													
	m	m	m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m
1	3	6	8	6 40	5 46	11 24	2 40	2 32	9 36	3 9	9 46	5 34	1 8	8 30	.....	7 34
2	3	5	8	6 38	5 47	12 22	3 48	3 47	10 40	4 27	10 49	6 45	0 23	9 24	2 12	8 36
3	2	4	6	6 37	5 49	1 31	4 46	4 59	11 36	5 35	11 47	7 53	1 39	10 10	3 8	9 38
4	2	4	5	6 35	5 50	2 47	5 34	6 1	12 30	6 32	.....	8 54	2 45	10 49	3 56	10 37
5	2	3	4	6 33	5 51	4 6	6 12	6 56	0 43	7 23	1 21	9 52	3 43	11 25	4 40	11 32
6	1	3	4	6 31	5 53	5 24	6 43	7 45	1 36	8 11	2 8	10 45	4 35	.....	5 20	.....
7	1	2	3	6 30	5 54	6 39	7 9	8 32	2 25	8 56	2 52	0 2	5 25	11 36	5 56	0 23
8	1	2	3	6 28	5 55	7 51	7 31	9 18	3 12	9 42	3 34	0 34	6 13	12 28	6 32	1 12
9	1	2	3	6 26	5 57	9 1	7 52	10 4	3 55	10 29	4 14	1 9	7 1	1 21	7 6	1 58
0	1	2	3	6 24	5 58	10 10	8 14	10 51	4 38	11 16	4 53	1 42	7 51	2 18	7 41	2 43
1	1	2	4	6 22	5 59	11 18	8 37	11 37	5 22	.....	5 33	2 16	8 43	3 21	8 19	3 28
2	1	3	4	6 20	6 1	.....	9 3	0 1	6 12	12 24	6 18	2 53	9 39	4 35	9 2	4 14
3	2	3	5	6 18	6 2	0 23	9 33	0 47	7 10	1 10	7 17	3 35	10 42	5 55	10 0	5 1
4	2	4	5	6 17	6 3	1 26	10 9	1 33	8 19	2 2	8 28	4 31	11 50	7 13	11 10	5 49
5	2	4	6	6 15	6 5	2 25	10 52	2 25	9 23	3 1	9 34	5 34	12 54	8 15	.....	6 39
6	2	5	7	6 13	6 6	3 17	11 43	3 25	10 19	4 9	10 29	6 36	0 30	9 2	1 50	7 29
7	3	5	7	6 11	6 7	4 2	12 40	4 26	11 10	5 9	11 19	7 35	1 38	9 40	2 37	8 20
8	3	5	8	6 9	6 8	4 41	1 44	5 23	11 55	5 59	.....	8 26	2 30	10 13	3 18	9 9
9	3	5	8	6 7	6 10	5 13	2 50	6 11	0 5	6 41	12 38	9 12	3 13	10 43	3 54	9 57
0	3	5	8	6 5	6 11	5 40	3 58	6 53	0 50	7 18	1 19	9 56	3 50	11 11	4 26	10 44
1	3	5	8	6 4	6 12	6 4	5 8	7 32	1 32	7 53	1 57	10 37	4 28	11 36	4 56	11 30
2	3	6	8	6 2	6 14	6 25	6 18	8 7	2 14	8 25	2 34	11 20	5 6	11 57	5 27	12 16
3	3	6	9	6 0	6 15	6 47	7 30	8 43	2 53	9 0	3 8	12 4	5 46	.....	5 58	1 1
4	3	6	9	5 58	6 16	7 9	8 44	9 21	3 31	9 37	3 42	0 21	6 30	12 57	6 30	1 49
5	3	6	9	5 56	6 17	7 33	9 59	10 3	4 10	10 22	4 16	0 48	7 16	1 55	7 6	2 38
6	3	6	9	5 54	6 19	8 1	11 16	10 53	4 52	11 15	4 53	1 17	8 10	3 2	7 48	3 31
7	3	6	9	5 52	6 20	8 36	.....	11 50	5 42	.....	5 33	1 56	9 11	4 25	8 35	4 28
8	3	6	8	5 50	6 21	9 20	0 32	0 13	6 48	12 52	6 48	2 44	10 20	5 53	9 42	5 23
9	3	5	8	5 48	6 22	10 14	1 42	1 16	8 10	1 59	8 21	3 53	11 35	7 11	11 6	6 29
0	2	4	7	5 47	6 24	11 19	2 43	2 25	9 23	3 9	9 33	5 14	12 45	8 9	.....	7 30
1	2	4	6	5 45	6 25	12 32	3 33	3 37	10 25	4 21	10 41	6 36	0 36	8 55	1 48	8 29

Morning and Evening Stars, March 1947

Morning stars: MERCURY, beginning Mar. 8. VENUS. In Capricornus, Mar. 15. MARS. In Aquarius, Mar. 15. JUPITER. In Libra, near Scorpius. On meridian Mar. 18 at 4 a.m., L.C.T.
Evening stars: MERCURY, to Mar. 8. SATURN. On meridian Mar. 12 at 9 p.m., L.C.T.

The deepest formation on the moon is probably the mountain-walled enclosure *Newton*, near the lunar south pole. The crater is about 140 miles across, and surrounded by high mountains rising to a height of 24,000 feet from the bottom of the interior. From the deepest spots, it is likely that the sun and the earth are forever invisible.

APRIL, 1947

A.M. in Light Figures; P.M. in Bold

Apr.	Sun slow	a- factor moonrise			Local Civil Time				Local Civil Time				Local Civil Time			
					Latitude 30°				Latitude 35°				Latitude 40°			
		90°	105°	120°	Sun- rise	Sun- set	Moon- rise	Moon- set	Sun- rise	Sun- set	Moon- rise	Moon- set	Sun- rise	Sun- set	Moon- rise	Moon- set
1 Tue.	m s	m	m	m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m
2 Wed.	4 14	3	6	9	5 51	6 18	2 24	3 34	5 48	6 20	2 13	3 45	5 46	6 23	2 2	3 5
3 Thu.	3 56	3	6	9	5 50	6 19	3 29	4 15	5 47	6 21	3 22	4 24	5 44	6 24	3 14	4 3
4 Fri.	3 38	3	6	9	5 48	6 19	4 33	4 52	5 46	6 22	4 29	4 57	5 43	6 25	4 24	5
5 Sat.	3 20	3	5	8	5 47	6 20	5 34	5 26	5 44	6 23	5 33	5 28	5 41	6 26	5 33	5 3
	3 2	3	5	8	5 46	6 20	6 34	5 57	5 43	6 24	6 37	5 57	5 40	6 27	6 39	5 5
6 Sun.	2 45	3	5	8	5 45	6 21	7 33	6 28	5 42	6 24	7 39	6 25	5 38	6 28	7 44	6 2
7 Mon.	2 27	3	5	8	5 44	6 22	8 32	7 0	5 40	6 25	8 40	6 53	5 36	6 29	8 49	6 4
8 Tue.	2 10	3	5	8	5 42	6 22	9 30	7 33	5 39	6 26	9 40	7 25	5 35	6 30	9 53	7 1
9 Wed.	1 53	3	5	7	5 41	6 23	10 28	8 10	5 38	6 27	10 40	7 59	5 33	6 31	10 55	7 4
10 Thu.	1 37	2	5	7	5 41	6 24	11 23	8 51	5 36	6 28	11 37	8 38	5 32	6 32	11 55	8 2
11 Fri.	1 20	2	5	7	5 39	6 24	.....	9 36	5 35	6 28	.....	9 21	5 30	6 33	.....	9
12 Sat.	1 4	2	4	6	5 38	6 25	0 16	10 25	5 34	6 29	0 31	10 10	5 29	6 34	0 49	9 5
13 Sun.	0 48	2	4	5	5 37	6 25	1 6	11 18	5 32	6 30	1 20	11 4	5 27	6 35	1 38	10 4
14 Mon.	0 33	2	3	5	5 36	6 26	1 51	12 14	5 31	6 31	2 4	12 0	5 26	6 36	2 20	11 4
15 Tue.	0 18	1	3	4	5 34	6 26	2 32	1 11	5 30	6 32	2 43	12 59	5 24	6 37	2 57	12 4
16 Wed.	FAST	1	2	3	5 33	6 27	3 8	2 8	5 28	6 32	3 18	2 0	5 22	6 38	3 29	1 5
17 Thu.	0 12	1	2	3	5 32	6 28	3 43	3 7	5 27	6 33	3 49	3 2	5 21	6 39	3 57	2 5
18 Fri.	0 25	1	2	3	5 31	6 28	4 15	4 6	5 26	6 34	4 19	4 4	5 20	6 40	4 23	4
19 Sat.	0 39	1	2	3	5 30	6 29	4 46	5 7	5 24	6 35	4 47	5 8	5 18	6 41	4 48	5
20 Sun.	0 52	1	2	3	5 29	6 30	5 18	6 10	5 23	6 36	5 16	6 14	5 16	6 42	5 14	6 1
21 Mon.	1 5	1	2	4	5 28	6 30	5 53	7 15	5 22	6 36	5 47	7 23	5 15	6 43	5 41	7 3
22 Tue.	1 18	1	3	4	5 27	6 31	6 31	8 23	5 21	6 37	6 22	8 34	5 14	6 44	6 12	8 4
23 Wed.	1 30	2	4	5	5 26	6 31	7 13	9 33	5 20	6 38	7 2	9 46	5 12	6 45	6 49	10
24 Thu.	1 41	2	4	6	5 25	6 32	8 3	10 42	5 18	6 39	7 49	10 56	5 11	6 46	7 34	11 1
25 Fri.	1 52	3	5	8	5 24	6 33	9 0	11 45	5 17	6 40	8 45	.....	5 10	6 47	8 28	.....
26 Sat.	2 3	3	6	9	5 23	6 33	10 3	.....	5 16	6 40	9 48	0 1	5 8	6 48	9 30	0 1
27 Sun.	2 13	3	6	9	5 22	6 34	11 9	0 44	5 15	6 41	10 55	0 57	5 7	6 49	10 40	1 1
28 Mon.	2 23	3	6	9	5 21	6 35	12 16	1 33	5 14	6 42	12 4	1 46	5 5	6 50	11 52	1 5
29 Tue.	2 32	3	6	9	5 20	6 35	1 21	2 16	5 13	6 43	1 13	2 25	5 4	6 51	1 4	2 3
30 Wed.	2 41	3	6	8	5 19	6 36	2 24	2 54	5 11	6 44	2 19	3 0	5 3	6 52	2 13	3

Standard Time of Moon's Phases, April 1947

	Eastern			Central			Mountain			Pacific		
	d	h	m	d	h	m	d	h	m	d	h	m
Full Moon.....	5	10	28 a.m.	5	9	28 a.m.	5	8	28 a.m.	5	7	28 a.m.
Last Quarter.....	13	9	23 a.m.	13	8	23 a.m.	13	7	23 a.m.	13	6	23 a.m.
New Moon.....	20	11	19 p.m.	20	10	19 p.m.	20	9	19 p.m.	20	8	19 p.m.
First Quarter.....	27	5	18 p.m.	27	4	18 p.m.	27	3	18 p.m.	27	2	18 p.m.

In spite of the nearness of Venus, practically nothing can be seen on its surface, because of the deep layer of clouds perpetually overlying the surface. Hence the rotational period cannot be determined with certainty. By indirect methods an indefinite period of a few weeks is found.

APRIL, 1947

A.M. in Light Figures; P.M. in Bold

				Local Civil Time				Eastern Standard Time				Pacific Standard Time				Local Civil Time
				Latitude 45°				Tides New York, N. Y. (The Battery)				Tides San Francisco, Cal. (Golden Gate)				
a-factor moonset			Sun-rise	Sun-set	Moon-rise	Moon-set	High	Low	High	Low	High	Low	High	Low	Moon's upper transit	
90°	105°	120°														
m	m	m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	
2	3	5	5 43	6 26	1 48	4 13	4 48	11 19	5 25	11 38	7 51	1 52	9 35	2 43	9 23	
1	3	4	5 41	6 28	3 5	4 45	5 48	12 9	6 18	.....	8 55	2 54	10 10	3 29	10 15
1	2	3	5 39	6 29	4 19	5 11	6 40	0 30	7 5	12 56	9 52	3 45	10 43	4 10	11 3	
1	2	3	5 37	6 30	5 31	5 33	7 26	1 20	7 49	1 42	10 46	4 33	11 15	4 46	11 49	
1	2	3	5 35	6 31	6 42	5 55	8 10	2 7	8 30	2 24	11 36	5 17	11 45	5 20	.....
1	2	3	5 34	6 33	7 51	6 16	8 52	2 51	9 12	3 4	12 27	5 58	.....	5 53	0 34
1	2	3	5 32	6 34	9 0	6 38	9 34	3 33	9 52	3 42	0 15	6 40	1 21	6 26	1 19	
1	3	4	5 30	6 35	10 8	7 3	10 17	4 13	10 35	4 19	0 43	7 23	2 15	7 1	2 5	
1	3	4	5 28	6 36	11 13	7 31	11 3	4 53	11 17	4 54	1 12	8 7	3 16	7 40	2 52	
2	3	5	5 26	6 38	.....	8 4	11 51	5 36	.....	5 30	1 48	8 56	4 24	8 27	3 41
2	4	6	5 24	6 39	0 14	8 44	0 0	6 26	12 39	6 16	2 26	9 52	5 39	9 30	4 30	
2	4	7	5 23	6 40	1 10	9 32	0 45	7 33	1 32	7 36	3 16	10 54	6 45	10 52	5 21	
2	5	7	5 21	6 42	1 59	10 26	1 35	8 42	2 28	8 56	4 32	11 56	7 35	.....	6 11
3	5	8	5 19	6 43	2 39	11 27	2 33	9 42	3 29	9 57	5 50	0 16	8 18	12 55	7 1	
3	5	8	5 17	6 44	3 13	12 32	3 37	10 31	4 27	10 47	7 0	1 22	8 54	1 43	7 49	
3	5	8	5 16	6 45	3 41	1 39	4 39	11 14	5 20	11 34	7 58	2 10	9 23	2 25	8 36	
3	5	8	5 14	6 46	4 6	2 48	5 33	11 58	6 2	.....	8 49	2 51	9 50	3 2	9 22
3	6	8	5 12	6 48	4 28	3 58	6 17	0 19	6 41	12 37	9 39	3 31	10 15	3 37	10 7	
3	6	9	5 10	6 49	4 49	5 9	6 57	1 2	7 16	1 19	10 28	4 10	10 38	4 11	10 53	
3	6	9	5 9	6 50	5 11	6 24	7 35	1 46	7 52	1 57	11 17	4 49	11 3	4 46	11 40	
3	6	9	5 7	6 52	5 34	7 40	8 15	2 29	8 29	2 35	12 9	5 31	11 30	5 21	12 30	
3	6	9	5 5	6 53	6 1	9 0	8 58	3 12	9 12	3 14	1 6	6 15	.....	5 58	1 23
3	6	9	5 4	6 54	6 34	10 19	9 48	3 55	10 2	3 56	0 2	7 3	2 7	6 39	2 20	
3	6	8	5 2	6 55	7 15	11 33	10 45	4 42	11 1	4 39	0 37	7 56	3 16	7 28	3 20	
3	5	8	5 0	6 57	8 7	.....	11 49	5 35	.....	5 33	1 22	8 56	4 32	8 26	4 23
2	5	7	4 59	6 58	9 10	0 39	0 5	6 41	12 51	6 47	2 20	10 1	5 45	9 44	5 25	
2	4	6	4 57	6 59	10 22	1 33	1 11	7 56	1 57	8 15	3 35	11 11	6 48	11 22	6 24	
2	3	5	4 56	7 0	11 37	2 15	2 16	9 5	3 2	9 27	5 3	12 19	7 37	.....	7 20
1	3	4	4 54	7 2	12 52	2 49	3 23	10 5	4 8	10 28	6 29	0 51	8 18	1 18	8 11	
1	2	3	4 52	7 3	2 6	3 16	4 29	10 56	5 6	11 23	7 45	2 0	8 57	2 7	9 0	

Morning and Evening Stars, April 1947

Morning stars: MERCURY. Western elongation, Apr. 5. VENUS. In Aquarius, Apr. 6. In Pisces, Apr. 24. MARS. In Pisces. JUPITER. In Libra. On meridian Apr. 16 at 2 a.m., L.C.T.
Evening star: SATURN. In Cancer. On meridian Apr. 11 at 7 p.m., L.C.T.

The *white-dwarf* stars are extraordinary objects. They are the densest bodies in the universe, the average density being 100,000 times that of water. The density at a white-dwarf's center may be many million times that of water, and it is believed that the temperature here reaches a few million degrees. A good example is the companion of Sirius. The nearest star (outside of the sun) is a bright double star, *Alpha Centauri*, seen best in south latitudes. Its distance is 4.3 light-years.

MAY, 1947

A.M. in Light Figures; P.M. in Bold

May	Sun fast	a- factor moonrise			Local Civil Time				Local Civil Time				Local Civil Time			
					Latitude 30°				Latitude 35°				Latitude 40°			
		90°	105°	120°	Sun- rise	Sun- set	Moon- rise	Moon- set	Sun- rise	Sun- set	Moon- rise	Moon- set	Sun- rise	Sun- set	Moon- rise	Moon- set
1 Thu.	m s	m	m	m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m
2 Fri.	2 49	3	5	8	5 18	6 37	3 25	3 27	5 10	6 44	3 23	3 31	5 2	6 53	3 21	3 3
3 Sat.	2 57	3	5	8	5 17	6 37	4 24	3 58	5 9	6 45	4 25	3 59	5 0	6 54	4 26	3 4
4 Sun.	3 4	3	5	8	5 16	6 38	5 22	4 29	5 8	6 46	5 27	4 26	4 59	6 55	5 31	4 5
5 Mon.	3 10	3	5	8	5 16	6 38	6 20	5 0	5 7	6 47	6 28	4 54	4 58	6 56	6 35	4 6
	3 16	3	5	8	5 15	6 39	7 19	5 32	5 6	6 48	7 28	5 24	4 57	6 57	7 39	5 1
6 Tue.	3 22	3	5	8	5 14	6 40	8 17	6 7	5 5	6 49	8 28	5 56	4 55	6 58	8 43	5 6
7 Wed.	3 27	2	5	7	5 13	6 40	9 14	6 47	5 4	6 49	9 28	6 34	4 54	6 59	9 44	6 1
8 Thu.	3 31	2	4	6	5 12	6 41	10 9	7 30	5 3	6 50	10 23	7 15	4 53	7 0	10 41	6 2
9 Fri.	3 35	2	4	6	5 11	6 42	11 0	8 18	5 2	6 51	11 15	8 2	4 52	7 1	11 32	7 3
10 Sat.	3 38	2	4	5	5 11	6 42	11 46	9 9	5 1	6 52	.....	8 53	4 51	7 2	.....	8 4
11 Sun.	3 41	2	3	5	5 10	6 43	.....	10 3	5 0	6 53	0 1	9 49	4 50	7 3	0 17	9 5
12 Mon.	3 43	1	3	4	5 9	6 44	0 28	10 59	5 0	6 53	0 41	10 47	4 49	7 4	0 55	10 6
13 Tue.	3 44	1	2	4	5 9	6 45	1 6	11 56	4 59	6 54	1 17	11 46	4 48	7 5	1 29	11 7
14 Wed.	3 45	1	2	3	5 8	6 45	1 41	12 53	4 58	6 55	1 48	12 46	4 47	7 6	1 58	12 8
15 Thu.	3 46	1	2	3	5 7	6 46	2 12	1 51	4 57	6 56	2 18	1 47	4 46	7 7	2 24	1 4
16 Fri.	3 45	1	2	3	5 7	6 46	2 43	2 50	4 56	6 56	2 46	2 49	4 45	7 8	2 48	2 5
17 Sat.	3 44	1	2	3	5 6	6 47	3 15	3 51	4 56	6 57	3 14	3 54	4 44	7 9	3 13	3 6
18 Sun.	3 43	1	2	3	5 5	6 48	3 47	4 55	4 55	6 58	3 44	5 1	4 43	7 10	3 40	5 7
19 Mon.	3 41	1	3	4	5 5	6 48	4 23	6 3	4 54	6 59	4 16	6 11	4 42	7 11	4 9	6 8
20 Tue.	3 38	2	3	5	5 4	6 49	5 5	7 13	4 54	7 0	4 54	7 24	4 41	7 12	4 43	7 9
21 Wed.	3 35	2	4	6	5 4	6 49	5 52	8 25	4 53	7 0	5 39	8 38	4 40	7 13	5 25	8 10
22 Thu.	3 31	2	5	7	5 3	6 50	6 48	9 33	4 52	7 1	6 33	9 48	4 40	7 14	6 16	10 11
23 Fri.	3 27	3	6	9	5 3	6 51	7 50	10 38	4 52	7 2	7 35	10 50	4 39	7 15	7 17	11 12
24 Sat.	3 22	3	6	9	5 2	6 51	8 57	11 30	4 51	7 2	8 44	11 42	4 38	7 15	8 27	11 13
25 Sun.	3 17	3	6	9	5 2	6 52	10 6	.....	4 50	7 3	9 55	.....	4 38	7 16	9 40	.....
26 Mon.	3 11	3	6	9	5 1	6 52	11 14	0 16	4 50	7 4	11 4	0 26	4 37	7 17	10 54	0 1
27 Tue.	3 5	3	6	8	5 1	6 53	12 18	0 55	4 50	7 5	12 12	1 3	4 36	7 18	12 5	1 2
28 Wed.	2 58	3	5	8	5 1	6 54	1 19	1 30	4 49	7 5	1 16	1 34	4 36	7 19	1 13	1 3
29 Thu.	2 51	3	5	8	5 0	6 54	2 18	2 1	4 49	7 6	2 19	2 3	4 35	7 20	2 18	2 4
30 Fri.	2 44	3	5	8	5 0	6 55	3 16	2 31	4 48	7 7	3 19	2 31	4 35	7 20	3 23	2 5
31 Sat.	2 36	3	5	8	5 0	6 55	4 14	3 2	4 48	7 7	4 19	2 58	4 34	7 21	4 26	2 6

Standard Time of Moon's Phases, May 1947

	Eastern			Central			Mountain			Pacific		
	d	h	m	d	h	m	d	h	m	d	h	m
Full Moon	4	11	53 p.m.	4	10	53 p.m.	4	9	53 p.m.	4	8	53 p.m.
Last Quarter	13	3	8 a.m.	13	2	8 a.m.	13	1	8 a.m.	13	0	8 a.m.
New Moon	20	8	44 a.m.	20	7	44 a.m.	20	6	44 a.m.	20	5	44 a.m.
First Quarter	26	11	35 p.m.	26	10	35 p.m.	26	9	35 p.m.	26	8	35 p.m.

Contrary to public opinion, the 200-inch telescope will be little used for planetary observation; medium telescopes are more adapted to this.

MAY, 1947

A.M. in Light Figures; P.M. in Bold

				Local Civil Time				Eastern Standard Time				Pacific Standard Time				Local Civil Time
				Latitude 45°				Tides New York, N. Y. (The Battery)				Tides San Francisco, Cal. (Golden Gate)				
Day	a-factor moonset			Sun-rise	Sun-set	Moon-rise	Moon-set	High	Low	High	Low	High	Low	High	Low	Moon's upper transit
	90°	105°	120°													
	m	m	m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m
	1	2	3	4 51	7 4	3 18	3 39	5 28	11 44	5 57	.....	8 52	2 56	9 31	2 53	9 45
	1	2	3	4 50	7 5	4 28	4 0	6 19	0 10	6 44	12 29	9 50	3 44	10 1	3 32	10 30
	1	2	3	4 48	7 7	5 37	4 20	7 3	1 1	9 25	1 14	10 45	4 26	10 31	4 9	11 14
	1	2	3	4 46	7 8	6 45	4 41	7 45	1 50	8 4	1 55	11 38	5 6	11 0	4 41	11 59
	1	2	4	4 45	7 9	7 53	5 4	8 25	2 30	8 42	2 34	12 27	5 43	11 29	5 15	.....
	1	3	4	4 44	7 10	8 59	5 30	9 6	3 11	9 20	3 13	1 21	6 20	11 54	5 48	0 45
	2	3	5	4 42	7 12	10 2	6 1	9 49	3 50	9 57	3 48	2 15	6 58	.....	6 24	1 33
	2	4	6	4 41	7 13	11 1	6 39	10 35	4 30	10 36	4 22	0 21	7 40	3 9	7 5	2 23
	2	4	6	4 40	7 14	11 53	7 24	11 22	5 9	11 17	4 54	0 52	8 23	4 8	7 58	3 13
	2	5	7	4 38	7 15	.....	8 16	12 12	5 53	.....	5 30	1 29	9 13	5 9	9 1	4 4
	3	5	7	4 37	7 16	0 37	9 14	0 1	6 48	1 2	6 26	2 19	10 6	6 5	10 19	4 53
	3	5	8	4 36	7 17	1 12	10 17	0 49	7 53	1 52	8 5	3 27	11 1	6 49	11 43	5 42
	3	5	8	4 34	7 19	1 42	11 22	1 41	8 55	2 43	9 17	4 53	11 53	7 26	.....	6 29
	3	5	8	4 33	7 20	2 8	12 29	2 38	9 46	3 36	10 10	6 15	0 50	7 58	12 42	7 14
	3	5	8	4 32	7 21	2 30	1 37	3 41	10 31	4 29	10 59	7 24	1 41	8 26	1 25	7 59
	3	6	8	4 31	7 22	2 51	2 47	4 42	11 13	5 18	11 46	8 26	2 28	8 53	2 7	8 43
	3	6	9	4 30	7 23	3 12	3 59	5 36	11 55	6 0	.....	9 25	3 9	9 21	2 46	9 29
	3	6	9	4 29	7 24	3 34	5 14	6 21	0 33	6 42	12 38	10 21	3 50	9 49	3 26	10 17
	3	6	9	4 28	7 25	3 59	6 34	7 6	1 19	7 24	1 22	11 18	4 32	10 19	4 7	11 8
	3	6	10	4 27	7 26	4 29	7 55	7 52	2 7	8 8	2 7	12 12	5 17	10 52	4 48	12 5
	3	6	9	4 26	7 28	5 8	9 14	8 40	2 55	8 56	2 52	1 11	6 2	11 31	5 31	1 5
	3	5	8	4 25	7 29	5 56	10 27	9 37	3 43	9 51	3 41	2 10	6 52	.....	6 21	2 9
	2	4	7	4 24	7 30	6 57	11 27	10 38	4 32	10 54	4 31	0 15	7 44	3 15	7 17	3 14
	2	3	5	4 23	7 31	8 8	.....	11 45	5 26	11 57	5 30	1 5	8 41	4 17	8 25	4 17
	2	3	5	4 22	7 32	9 24	0 15	12 46	6 28	.....	6 40	2 10	9 40	5 17	9 50	5 15
	1	3	4	4 21	7 33	10 42	0 52	1 0	7 35	1 45	7 59	3 25	10 42	6 10	11 25	6 9
	1	2	4	4 20	7 34	11 57	1 21	2 0	8 40	2 45	9 9	4 54	11 41	6 56	.....	6 58
	1	2	3	4 20	7 35	1 9	1 45	3 1	9 38	3 43	10 10	6 21	0 51	7 37	12 36	7 44
	1	2	3	4 19	7 36	2 19	2 6	4 2	10 29	4 41	11 4	7 39	1 56	8 15	1 25	8 29
	1	2	3	4 18	7 36	3 27	2 26	5 0	11 18	5 33	11 53	8 49	2 49	8 49	2 11	9 12
	1	2	3	4 18	7 37	4 34	2 47	5 54	12 1	6 19	.....	9 51	3 35	9 22	2 50	9 56

Morning and Evening Stars, May 1947

Morning stars: MERCURY, to May 15. VENUS. In Pisces and Aries. MARS. In Pisces and Aries. JUPITER, to May 14.

Evening stars: MERCURY, beginning May 15. JUPITER, beginning May 14. On meridian May 13 at 0^h L.C.T. SATURN. On meridian May 30 at 4 p.m., L.C.T.

According to the theory of the expanding universe, the speed of receding extra-galactic nebulae is such that the radius of the universe doubles every 1,300,000,000 years; but this idea is rather speculative.

JUNE, 1947

A.M. in Light Figures; P.M. in Bold

June	Sun fast	Local Civil Time				Local Civil Time				Local Civil Time			
		Latitude 30°				Latitude 35°				Latitude 40°			
		a- factor moonrise			Sun- rise	Sun- set	Moon- rise	Moon- set		Sun- rise	Sun- set	Moon- rise	Moon- set
		90°	105°	120°									
1 Sun.	m s	m	m	m	h m	h m	h m	h m		h m	h m	h m	h m
2 Mon.	2 28	3	5	8	4 59	6 56	5 11	3 33	4 47	7 8	5 20	3 26	4 34
3 Tue.	2 19	3	5	8	4 59	6 56	6 8	4 7	4 47	7 8	6 20	3 57	4 33
4 Wed.	2 9	2	5	7	4 59	6 56	7 6	4 44	4 47	7 9	7 19	4 32	4 33
5 Thu.	2 0	2	5	7	4 59	6 57	8 1	5 25	4 46	7 10	8 16	5 12	4 32
6 Fri.	1 50	2	4	6	4 59	6 58	8 54	6 11	4 46	7 10	9 9	5 57	4 32
7 Sat.	1 40	2	3	5	4 58	6 58	9 42	7 2	4 46	7 11	9 57	6 47	4 32
8 Sun.	1 29	2	3	4	4 58	6 59	10 26	7 55	4 46	7 11	10 39	7 41	4 31
9 Mon.	1 18	1	2	4	4 58	6 59	11 5	8 51	4 46	7 12	11 16	8 38	4 31
10 Tue.	1 7	1	2	3	4 58	7 0	11 40	9 47	4 46	7 12	11 49	9 36	4 31
11 Wed.	0 55	1	2	3	4 58	7 0	.....	10 43	4 45	7 13	.....	10 35	4 31
12 Thu.	0 44	1	2	3	4 58	7 1	0 12	11 40	4 45	7 13	0 19	11 34	4 31
13 Fri.	0 32	1	2	3	4 58	7 1	0 42	12 37	4 45	7 14	0 47	12 34	4 30
14 Sat.	0 19	1	2	3	4 58	7 1	1 13	1 35	4 45	7 14	1 14	1 35	4 30
15 Sun.	0 7	1	2	3	4 58	7 2	1 44	2 36	4 45	7 15	1 41	2 40	4 30
16 Mon.	SLOW	1	2	4	4 58	7 2	2 17	3 40	4 45	7 15	2 12	3 48	4 30
17 Tue.	0 19	2	3	4	4 58	7 2	2 55	4 49	4 45	7 15	2 46	4 58	4 30
18 Wed.	0 31	2	4	6	4 58	7 3	3 38	6 0	4 45	7 16	3 27	6 12	4 30
19 Thu.	0 44	2	5	7	4 59	7 3	4 31	7 11	4 45	7 16	4 17	7 26	4 30
20 Fri.	0 58	3	5	8	4 59	7 3	5 31	8 19	4 46	7 16	5 16	8 34	4 30
21 Sat.	1 11	3	6	9	4 59	7 4	6 39	9 19	4 46	7 17	6 23	9 33	4 31
22 Sun.	1 24	3	6	9	4 59	7 4	7 50	10 10	4 46	7 17	7 36	10 22	4 31
23 Mon.	1 37	3	6	9	4 59	7 4	9 0	10 53	4 46	7 17	8 50	11 2	4 31
24 Tue.	1 50	3	6	9	4 59	7 4	10 8	11 31	4 46	7 17	10 0	11 36	4 31
25 Wed.	2 3	3	6	8	5 0	7 4	11 12	.....	4 46	7 17	11 8	.....	4 31
26 Thu.	2 16	3	5	8	5 0	7 4	12 12	0 4	4 47	7 18	12 12	0 6	4 32
27 Fri.	2 29	3	5	8	5 0	7 5	1 11	0 35	4 47	7 18	1 13	0 34	4 32
28 Sat.	2 41	3	5	8	5 0	7 5	2 9	1 5	4 48	7 18	2 13	1 2	4 32
29 Sun.	2 54	3	5	8	5 1	7 5	3 6	1 35	4 48	7 18	3 13	1 30	4 33
30 Mon.	3 6	3	5	8	5 1	7 5	4 3	2 8	4 48	7 18	4 13	2 0	4 33
31 Mon.	3 18	3	5	7	5 1	7 5	5 0	2 44	4 48	7 18	5 12	2 33	4 34

Standard Time of Moon's Phases, June 1947

	Eastern			Central			Mountain			Pacific		
	d	h	m	d	h	m	d	h	m	d	h	m
Full Moon.....	3	2	27 p.m.	3	1	27 p.m.	3	12	27 p.m.	3	11	27 a.m.
1st Quarter.....	11	5	58 p.m.	11	4	58 p.m.	11	3	58 p.m.	11	2	58 p.m.
New Moon.....	18	4	26 p.m.	18	3	26 p.m.	18	2	26 p.m.	18	1	26 p.m.
First Quarter.....	25	7	25 a.m.	25	6	25 a.m.	25	5	25 a.m.	25	4	25 a.m.

The last great comet to appear in the sky was the magnificent *Halley's Comet* (1910). This comet is now out beyond Neptune's orbit and will reach aphelion in 1948, after which it will be approaching the sun again, and will continue toward next perihelion, which is scheduled for Feb. 1986.

JUNE, 1947

A.M. in Light Figures; P.M. in Bold

Local Civil Time				Eastern Standard Time				Pacific Standard Time				Local Civil Time			
Latitude 45°				Tides				Tides							
New York, N. Y. (The Battery)				San Francisco, Cal. (Golden Gate)											
a-factor moonset			Sun-rise	Sun-set	Moon-rise	Moon-set	High	Low	High	Low	High	Low	High	Low	Moon's upper transit
90°	105°	120°													
m	m	m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m
1	2	3	4 17	7 38	5 42	3 9	6 40	0 41	7 0	12 45	10 47	4 16	9 52	3 29	10 41
2	3	4	4 16	7 39	6 49	3 33	7 23	1 26	7 39	1 28	11 39	4 52	10 22	4 6	11 28
3	4	4	4 16	7 40	7 53	4 2	8 3	2 9	8 16	2 9	12 28	5 28	10 50	4 41	.....
4	5	5	4 16	7 41	8 54	4 37	8 44	2 51	8 52	2 48	1 18	6 4	11 21	5 17	0 17
5	6	6	4 15	7 42	9 48	5 19	9 26	3 32	9 29	3 25	2 5	6 39	11 50	5 56	1 7
6	7	7	4 15	7 42	10 34	6 8	10 10	4 10	10 4	4 0	2 52	7 16	.....	6 41	1 58
7	8	7	4 14	7 43	11 13	7 4	10 58	4 47	10 44	4 33	0 21	7 56	3 39	7 31	2 48
8	9	7	4 14	7 44	11 45	8 5	11 46	5 26	11 24	5 7	0 58	8 39	4 29	8 29	3 37
9	10	8	4 14	7 44	.....	9 10	12 29	6 7	.....	5 46	1 44	9 22	5 12	9 39	4 24
10	11	8	4 13	7 45	0 11	10 16	0 9	6 58	1 12	6 55	2 41	10 7	5 52	10 53	5 9
11	12	8	4 13	7 46	0 34	11 22	0 53	7 55	1 55	8 24	3 59	10 53	6 25	.....	5 53
12	1	8	4 13	7 46	0 55	12 29	1 42	8 51	2 42	9 27	5 32	0 4	6 57	11 41	6 36
1	2	8	4 13	7 47	1 15	1 38	2 39	9 42	3 34	10 22	6 58	1 6	7 27	12 27	7 20
2	3	8	4 12	7 47	1 36	2 50	3 42	10 28	4 29	11 13	8 10	1 56	7 57	1 14	8 5
3	4	9	4 12	7 48	1 58	4 5	4 48	11 13	5 24	.....	9 18	2 45	8 31	2 1	8 54
4	5	9	4 12	7 48	2 25	5 25	5 49	0 4	6 13	12 2	10 19	3 32	9 8	2 51	9 47
5	6	9	4 12	7 49	2 59	6 46	6 41	0 56	7 2	12 53	11 15	4 18	9 47	3 36	10 45
6	7	9	4 12	7 49	3 42	8 4	7 33	1 48	7 52	1 45	12 9	5 4	10 31	4 24	11 49
7	8	7	4 13	7 49	4 38	9 12	8 27	2 39	8 45	2 38	1 5	5 52	11 17	5 16	12 55
8	9	6	4 13	7 50	5 46	10 7	9 26	3 29	9 42	3 30	1 58	6 41	.....	6 10	2 1
9	10	6	4 13	7 50	7 4	10 50	10 27	4 20	10 44	4 23	0 7	7 31	2 51	7 12	3 4
10	11	6	4 13	7 50	8 24	11 23	11 29	5 10	11 44	5 19	1 5	8 22	3 44	8 23	4 1
11	12	6	4 13	7 50	9 43	11 49	12 27	6 5	.....	6 23	2 7	9 14	4 35	9 42	4 54
12	1	6	4 13	7 50	10 58	.....	0 41	7 5	1 23	7 34	3 17	10 5	5 21	11 8	5 42
1	2	6	4 14	7 50	12 10	0 11	1 38	8 7	2 18	8 43	4 40	10 57	6 8	.....	6 27
2	3	6	4 14	7 51	1 19	0 32	2 33	9 5	3 14	9 45	6 7	0 31	6 49	11 48	7 11
3	4	6	4 14	7 51	2 27	0 52	3 31	9 58	4 10	10 39	7 28	1 36	7 29	12 40	7 55
4	5	6	4 15	7 51	3 34	1 14	4 30	10 47	5 4	11 10	8 46	2 32	8 7	1 28	8 40
5	6	6	4 15	7 50	4 40	1 37	5 26	11 32	5 52	.....	9 49	3 19	8 44	2 16	9 26
6	7	6	4 16	7 50	5 45	2 4	6 15	0 16	6 37	12 18	10 44	3 59	9 20	3 0	10 13

Morning and Evening Stars, June 1947

Morning stars: VENUS. In Taurus, between Aldebaran and the Pleiades, June 15. MARS. In Aries and Taurus.

Evening stars: MERCURY. Eastern elongation, June 17. JUPITER. In Libra. On meridian June 9 at 10 p.m., L.C.T. SATURN. In Cancer.

The *Zodiacal Light* is a faint triangular shaft of light occasionally observed in the west after sunset or in the east before sunrise. With its base at the horizon, it extends for a distance along the ecliptic. It is a ghostly and mysterious object and is thought to be a great cloud of scattered dust particles with its center at the sun and extending outward along the plane of the earth's orbit to a distance beyond the earth.

JULY, 1947

A.M. in Light Figures; P.M. in Bold

July	Sun slow	Local Civil Time			Latitude 30°				Latitude 35°				Latitude 40°			
		a- factor moonrise			Sun- rise	Sun- set	Moon- rise	Moon- set	Sun- rise	Sun- set	Moon- rise	Moon- set	Sun- rise	Sun- set	Moon- rise	Moon- set
		90°	105°	120°												
1 Tue.	3 30	m	m	m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m
2 Wed.	3 42	2	4	6	5 2	7 5	5 55	3 24	4 49	7 18	6 10	3 10	4 34	7 33	6 27	2 5
3 Thu.	3 53	2	4	5	5 2	7 5	6 49	4 9	4 49	7 18	7 4	3 54	4 34	7 33	7 22	3 3
4 Fri.	4 4	2	3	5	5 3	7 5	8 25	5 50	4 50	7 18	8 38	5 36	4 36	7 32	8 54	5 1
5 Sat.	4 15	1	3	4	5 3	7 5	9 5	6 45	4 51	7 18	9 18	6 32	4 36	7 32	9 81	6 1
6 Sun.	4 25	1	2	3	5 4	7 5	9 41	7 41	4 51	7 17	9 50	7 29	4 37	7 32	10 2	7 1
7 Mon.	4 35	1	2	3	5 4	7 5	10 13	8 37	4 52	7 17	10 21	8 28	4 37	7 32	10 29	8 1
8 Tue.	4 45	1	2	3	5 5	7 4	10 44	9 33	4 52	7 17	10 48	9 27	4 38	7 31	10 63	9 2
9 Wed.	4 55	1	2	3	5 5	7 4	11 13	10 29	4 53	7 17	11 15	10 25	4 38	7 31	11 17	10 2
10 Thu.	5 3	1	2	3	5 6	7 4	11 42	11 25	4 53	7 16	11 42	11 25	4 39	7 31	11 40	11 2
11 Fri.	5 12	1	2	3	5 6	7 4	.....	12 22	4 54	7 16	.....	12 26	4 40	7 30	.....	12 2
12 Sat.	5 20	1	2	3	5 7	7 4	0 14	1 23	4 54	7 16	0 10	1 30	4 40	7 30	0 5	1 8
13 Sun.	5 28	1	3	4	5 7	7 3	0 49	2 28	4 55	7 16	0 41	2 38	4 41	7 29	0 33	2 4
14 Mon.	5 36	2	3	5	5 8	7 3	1 28	3 37	4 56	7 15	1 18	3 48	4 42	7 29	1 6	4
15 Tue.	5 43	2	4	6	5 8	7 3	2 14	4 47	4 56	7 15	2 2	5 1	4 43	7 28	1 47	5 1
16 Wed.	5 49	3	5	8	5 9	7 2	3 10	5 56	4 57	7 14	2 56	6 12	4 43	7 28	2 39	6 2
17 Thu.	5 55	3	6	9	5 9	7 2	4 15	7 1	4 58	7 14	4 0	7 15	4 44	7 27	3 42	7 3
18 Fri.	6 0	3	6	10	5 10	7 2	5 25	7 57	4 58	7 13	5 11	8 10	4 45	7 27	4 54	8 2
19 Sat.	6 5	3	7	10	5 10	7 1	6 38	8 46	4 59	7 13	6 27	8 55	4 46	7 26	6 12	9
20 Sun.	6 10	3	6	9	5 11	7 1	7 49	9 28	5 0	7 12	7 41	9 33	4 46	7 25	7 31	9 4
21 Mon.	6 14	3	6	9	5 12	7 0	8 58	10 2	5 0	7 12	8 51	10 5	4 47	7 25	8 46	10 1
22 Tue.	6 17	3	6	8	5 12	7 0	10 2	10 35	5 1	7 11	9 59	10 35	4 48	7 24	9 57	10 8
23 Wed.	6 19	3	5	8	5 13	6 59	11 2	11 6	5 2	7 10	11 3	11 4	4 49	7 23	11 5	11
24 Thu.	6 21	3	5	8	5 13	6 59	12 1	11 37	5 2	7 10	12 6	11 31	4 50	7 22	12 10	11 5
25 Fri.	6 23	3	5	8	5 14	6 58	1 0	.....	5 3	7 9	1 7	.....	4 51	7 21	1 15	11 5
26 Sat.	6 24	3	5	8	5 14	6 58	1 57	0 9	5 4	7 8	2 7	0 1	4 52	7 21	2 18	.....
27 Sun.	6 24	3	5	8	5 15	6 57	2 55	0 45	5 5	7 8	3 7	0 33	4 52	7 20	3 21	0 2
28 Mon.	6 24	2	5	7	5 16	6 56	3 50	1 23	5 5	7 7	4 5	1 10	4 53	7 19	4 21	0 5
29 Tue.	6 23	2	4	6	5 16	6 56	4 45	2 6	5 6	7 6	5 0	1 52	4 54	7 18	5 18	1 5
30 Wed.	6 21	2	4	6	5 17	6 55	5 36	2 54	5 7	7 5	5 51	2 39	4 55	7 17	6 9	2 2
31 Thu.	6 19	2	3	5	5 18	6 55	6 22	3 45	5 8	7 4	6 37	3 30	4 56	7 16	6 53	3 1

Standard Time of Moon's Phases, July 1947

	Eastern			Central			Mountain			Pacific		
	d	h	m	d	h	m	d	h	m	d	h	m
Full Moon.....	3	5	38 a.m.	3	4	38 a.m.	3	3	38 a.m.	3	2	38 a.m.
Last Quarter.....	11	5	54 a.m.	11	4	54 a.m.	11	3	54 a.m.	11	2	54 a.m.
New Moon.....	17	11	15 p.m.	17	10	15 p.m.	17	9	15 p.m.	17	8	15 p.m.
First Quarter.....	24	5	54 p.m.	24	4	54 p.m.	24	3	54 p.m.	24	2	54 p.m.

The interior of the great elongated mountain-walled plain *Grimaldi*, near the eastern limb of the moon, is the darkest spot on the moon's surface.

JULY, 1947

A.M. in Light Figures; P.M. in Bold

				Local Civil Time				Eastern Standard Time				Pacific Standard Time				Local Civil Time
				Latitude 45°				Tides New York, N. Y. (The Battery)				Tides San Francisco, Cal. (Golden Gate)				
a- factor moonset				Sun- rise	Sun- set	Moon- rise	Moon- set	High	Low	High	Low	High	Low	High	Low	Moon's upper transit
90°	105°	120°														
	m	m	m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m
	2 3	5		4 16	7 50	6 47	2 37	7 1	1 4	7 17	1 2	11 31	4 35	9 53	3 43	11 3
	2 4	6		4 17	7 50	7 43	3 17	7 43	1 48	7 55	1 45	12 16	5 12	10 26	4 23	11 53
	2 4	7		4 17	7 50	8 32	4 4	8 24	2 31	8 31	2 27	12 58	5 45	10 58	5 0	.....
	2 5	7		4 18	7 50	9 12	4 58	9 7	3 12	9 7	3 6	1 38	6 18	11 29	5 41	0 44
	3 5	7		4 19	7 50	9 46	5 58	9 49	3 50	9 42	3 42	2 17	6 52	.....	6 24	1 33
	3	5	8	4 19	7 49	10 14	7 1	10 32	4 25	10 18	4 16	0 2	7 29	2 57	7 8	2 21
	3 5	8	8	4 20	7 49	10 38	8 6	11 13	4 58	10 54	4 47	0 39	8 5	3 34	8 2	3 6
	3 5	8	8	4 21	7 48	10 59	9 12	11 51	5 29	11 30	5 21	1 23	8 41	4 10	9 2	3 50
	3 5	8	8	4 21	7 48	11 19	10 17	12 29	6 5	.....	6 4	2 19	9 19	4 40	10 8	4 33
	3 5	8	8	4 22	7 48	11 38	11 24	0 13	6 44	1 7	7 18	3 27	10 0	5 12	11 17	5 15
	3	6	8	4 23	7 47	.....	12 33	1 1	7 41	1 51	8 41	5 2	10 43	5 46	.....	5 59
	3 6	9	8	4 24	7 46	0 0	1 44	1 52	8 44	2 44	9 47	6 35	0 25	6 24	11 32	6 45
	3 6	9	8	4 24	7 46	0 24	2 59	2 54	9 43	3 46	10 45	8 3	1 28	7 7	12 25	7 34
	3 6	9	8	4 25	7 45	0 53	4 18	4 10	10 40	4 52	11 41	9 15	2 21	7 53	1 24	8 28
	3 6	9	8	4 26	7 45	1 30	5 37	5 23	11 37	5 52	.....	10 15	3 14	8 42	2 20	9 28
	3	5	8	4 27	7 44	2 18	6 50	6 25	0 37	6 49	12 34	11 7	4 4	9 31	3 18	10 32
	2 4	7	8	4 28	7 43	3 21	7 52	7 20	1 32	7 41	1 32	11 56	4 52	10 21	4 13	11 39
	2 4	5	8	4 29	7 42	4 35	8 41	8 16	2 23	8 36	2 27	12 42	5 39	11 14	5 9	12 44
	1 3	4	30	7 42	4 56	9 19	9 11	3 13	9 30	3 20	1 28	6 25	.....	6 5	1 46	
	1 2	4	31	7 41	7 20	9 49	10 9	4 0	10 27	4 10	0 7	7 10	2 13	7 6	2 42	
	1	2	3	4 32	7 40	8 39	10 14	11 7	4 48	11 24	5 3	1 4	7 56	2 57	8 12	3 34
	1 2	3	33	7 39	9 54	10 36	12 2	5 37	.....	6 0	2 3	8 40	3 43	9 22	4 22	
	1 2	3	34	7 38	11 7	10 57	0 16	6 30	12 55	7 2	3 10	9 26	4 28	10 36	5 8	
	1 2	3	35	7 37	12 16	11 18	1 8	7 29	1 45	8 10	4 31	10 13	5 14	11 54	5 52	
	1 2	3	36	7 36	1 24	11 41	2 0	8 28	2 39	9 14	5 58	11 2	5 58	.....	6 37	
	1	2	4	4 37	7 35	2 32	.....	2 56	9 24	3 33	10 11	7 22	1 6	6 44	11 57	7 23
	1 3	4	38	7 34	3 37	0 7	3 54	10 16	4 30	11 5	8 20	2 4	7 31	12 57	8 10	
	2 3	5	39	7 33	4 40	0 38	4 55	11 6	5 24	11 52	9 41	2 55	8 14	1 55	8 59	
	2 4	5	40	7 32	5 38	1 15	5 52	11 53	6 12	.....	10 29	3 36	8 58	2 48	9 49	
	2 4	6	42	7 30	6 29	2 0	6 40	0 40	6 54	12 40	11 13	4 18	9 36	3 35	10 40	
	2	5	7	4 43	7 29	7 13	2 52	7 24	1 26	7 35	1 25	11 50	4 51	10 14	4 14	11 30

AUGUST, 1947

A.M. in Light Figures; P.M. in Bold

Aug.	Sun slow	a- factor moonrise				Local Civil Time				Local Civil Time				Local Civil Time			
						Latitude 30°				Latitude 35°				Latitude 40°			
		90°	105°	120°	Sun- rise	Sun- set	Moon- rise	Moon- set	Sun- rise	Sun- set	Moon- rise	Moon- set	Sun- rise	Sun- set	Moon- rise	Moon- set	
1 Fri.	m s	m	m	m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	
2 Sat.	6 16	1	3	4	5 18	6 54	7 4	4 40	5 8	7 4	7 17	4 26	4 57	7 15	7 31	4 10	
3 Sun.	6 9	1	2	3	5 19	6 53	7 42	5 36	5 9	7 3	7 53	5 23	4 58	7 14	8 4	5 10	
4 Mon.	6 4	1	2	3	5 19	6 52	8 16	6 32	5 10	7 2	8 24	6 22	4 59	7 13	8 32	6 11	
5 Tue.	5 59	1	2	3	5 20	6 52	8 47	7 28	5 10	7 1	8 52	7 21	5 0	7 12	8 58	7 11	
					5 20	6 51	9 16	8 24	5 11	7 0	9 18	8 20	5 1	7 10	9 22	8 11	
6 Wed.	5 53	1	2	3	5 21	6 50	9 45	9 20	5 12	6 59	9 45	9 18	5 2	7 9	9 44	9 11	
7 Thu.	5 46	1	2	3	5 22	6 49	10 15	10 16	5 13	6 58	10 12	10 18	5 3	7 8	10 8	10 21	
8 Fri.	5 39	1	2	4	5 22	6 48	10 47	11 15	5 14	6 57	10 41	11 19	5 4	7 7	10 34	11 21	
9 Sat.	5 32	1	3	4	5 23	6 48	11 23	12 16	5 14	6 56	11 15	12 24	5 5	7 6	11 4	12 31	
10 Sun.	5 24	2	4	5	5 24	6 47	.....	1 21	5 15	6 55	11 54	1 32	5 6	7 5	11 40	1 41
11 Mon.	5 15	2	4	6	5 24	6 46	0 5	2 28	5 16	6 54	.....	2 42	5 6	7 3	.....	2 51
12 Tue.	5 6	2	4	7	5 25	6 45	0 55	3 37	5 17	6 53	0 41	3 51	5 7	7 2	0 25	4 10	
13 Wed.	4 56	3	5	8	5 25	6 44	1 54	4 42	5 17	6 52	1 39	4 56	5 8	7 1	1 21	5 11	
14 Thu.	4 46	3	6	9	5 26	6 43	3 1	5 41	5 18	6 51	2 45	5 55	5 9	7 0	2 28	6 1	
15 Fri.	4 35	3	7	10	5 26	6 42	4 12	6 33	5 19	6 50	3 59	6 44	5 10	6 58	3 43	6 51	
16 Sat.	4 24	3	7	10	5 27	6 41	5 25	7 17	5 20	6 48	5 15	7 25	5 11	6 57	5 2	7 3	
17 Sun.	4 12	3	6	9	5 28	6 40	6 35	7 56	5 20	6 47	6 29	8 1	5 12	6 56	6 21	8 1	
18 Mon.	3 59	3	6	9	5 28	6 39	7 43	8 31	5 21	6 46	7 39	8 32	5 13	6 54	7 35	8 3	
19 Tue.	3 46	3	6	9	5 29	6 38	8 47	9 4	5 22	6 45	8 47	9 2	5 14	6 53	8 46	9 1	
20 Wed.	3 33	3	6	8	5 29	6 37	9 48	9 36	5 23	6 44	9 52	9 31	5 15	6 51	9 55	9 2	
21 Thu.	3 19	3	5	8	5 30	6 36	10 48	10 8	5 23	6 42	10 55	10 0	5 16	6 50	11 2	9 5	
22 Fri.	3 4	3	5	8	5 31	6 35	11 48	10 43	5 24	6 41	11 58	10 32	5 17	6 48	12 7	10 2	
23 Sat.	2 49	3	5	8	5 31	6 34	12 47	11 21	5 25	6 40	12 58	11 8	5 18	6 47	1 12	10 5	
24 Sun.	2 34	2	5	7	5 32	6 33	1 44	.....	5 26	6 39	1 58	11 48	5 19	6 46	2 13	11 3
25 Mon.	2 18	2	5	7	5 32	6 32	2 40	0 2	5 26	6 38	2 54	.....	5 20	6 44	3 11	.....
26 Tue.	2 2	2	4	6	5 33	6 31	3 32	0 48	5 27	6 36	3 47	0 33	5 21	6 43	4 5	0 11	
27 Wed.	1 45	2	3	5	5 33	6 29	4 20	1 39	5 28	6 35	4 35	1 23	5 22	6 41	4 51	1 10	
28 Thu.	1 28	2	3	4	5 34	6 28	5 3	2 33	5 29	6 34	5 17	2 19	5 23	6 40	5 31	2 10	
29 Fri.	1 10	1	2	4	5 34	6 27	5 42	3 29	5 29	6 32	5 54	3 16	5 24	6 38	6 6	3 10	
30 Sat.	0 53	1	2	3	5 35	6 26	6 17	4 26	5 30	6 31	6 26	4 14	5 24	6 36	6 36	4 10	
31 Sun.	0 34	1	2	3	5 36	6 25	6 49	5 22	5 31	6 30	6 55	5 14	5 25	6 35	7 2	5 10	

Standard Time of Moon's Phases, August 1947

	Eastern		Central		Mountain		Pacific	
	d	h m	d	h m	d	h m	d	h m
Full Moon.....	1	8 50 p.m.	1	7 50 p.m.	1	6 50 p.m.	1	5 50 p.m.
Last Quarter.....	9	3 22 p.m.	9	2 22 p.m.	9	1 22 p.m.	9	12 22 p.m.
New Moon.....	16	6 12 a.m.	16	5 12 a.m.	16	4 12 a.m.	16	3 12 a.m.
First Quarter.....	23	7 40 a.m.	23	6 40 a.m.	23	5 40 a.m.	23	4 40 a.m.
Full Moon.....	31	11 34 a.m.	31	10 34 a.m.	31	9 34 a.m.	31	8 34 a.m.

On a clear night, the average person may see about 3,000 stars.

AUGUST, 1947

A.M. in Light Figures; P.M. in Bold

			Local Civil Time				Eastern Standard Time				Pacific Standard Time				Local Civil Time
			Latitude 45°				New York, N. Y. (The Battery)				San Francisco, Cal. (Golden Gate)				
							Tides				Tides				
a-factor moonset			Sun-rise	Sun-set	Moon-rise	Moon-set	High	Low	High	Low	High	Low	High	Low	Moon's upper transit
90°	105°	120°													
m	m	m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m
2	5	7	4 44	7 28	7 48	3 51	8 4	2 8	8 12	2 8	12 25	5 23	10 48	4 53	.....
3	5	8	4 45	7 27	8 18	4 54	8 43	2 47	8 47	2 48	1 0	5 54	11 21	5 30	0 18
3	5	8	4 46	7 26	8 44	5 59	9 22	3 24	9 20	3 25	1 31	6 25	.....	6 10	1 5
3	5	8	4 47	7 24	9 5	7 4	9 57	3 58	9 55	3 56	0 0	6 55	2 1	6 49	1 49
3	5	8	4 48	7 23	9 25	8 10	10 33	4 29	10 25	4 29	0 37	7 26	2 28	7 41	2 32
3	5	8	4 50	7 21	9 44	9 16	11 7	4 55	11 0	5 1	1 22	8 0	2 54	8 30	3 14
3	5	8	4 51	7 20	10 4	10 22	11 42	5 21	11 41	5 40	2 16	8 34	3 22	9 32	3 57
3	6	8	4 52	7 19	10 26	11 32	12 24	5 51	.....	6 33	3 25	9 14	3 55	10 37	4 41
3	6	9	4 53	7 17	10 52	12 44	0 29	6 35	1 12	8 0	5 0	9 57	4 39	11 48	5 27
3	6	9	4 54	7 16	11 24	1 59	1 23	7 46	2 9	9 20	6 37	10 51	5 30	.....	6 18
3	6	9	4 55	7 14	.....	3 16	2 28	9 13	3 18	10 25	8 0	0 58	6 28	11 58	7 13
3	6	8	4 57	7 13	0 6	4 29	3 50	10 21	4 33	11 23	9 10	2 0	7 27	1 5	8 14
2	5	7	4 58	7 11	1 0	5 35	5 9	11 23	5 40	.....	10 2	2 58	8 30	2 12	9 18
2	4	6	4 59	7 10	2 8	6 29	6 14	0 19	6 37	12 24	10 47	3 50	9 26	3 15	10 23
2	3	5	5 0	7 8	3 26	7 12	7 8	1 13	7 30	1 20	11 30	4 36	10 20	4 11	11 26
1	3	4	5 1	7 6	4 48	7 46	8 1	2 4	8 22	2 13	12 11	5 22	11 13	5 6	12 26
1	2	3	5 2	7 5	6 11	8 13	8 53	2 52	9 14	3 5	12 50	6 3	.....	5 59	1 20
1	2	3	5 4	7 3	7 31	8 37	9 45	3 37	10 4	3 53	0 7	6 43	1 29	6 54	2 11
1	2	3	5 5	7 2	8 46	8 58	10 38	4 22	10 57	4 42	1 3	7 23	2 9	7 52	2 59
1	2	3	5 6	7 0	10 0	9 20	11 30	5 7	11 48	5 32	2 1	8 3	2 45	8 52	3 45
1	2	3	5 7	6 58	11 11	9 43	12 20	5 52	.....	6 27	3 8	8 43	3 27	9 59	4 31
1	3	4	5 8	6 57	12 20	10 8	0 38	6 44	1 9	7 33	4 25	9 28	4 12	11 7	5 18
2	3	4	5 10	6 55	1 28	10 37	1 27	7 44	2 0	8 38	5 48	10 21	5 1	.....	6 5
2	4	5	5 11	6 53	2 33	11 13	2 19	8 47	2 53	9 40	7 12	0 19	5 58	11 25	6 54
2	4	6	5 12	6 52	3 32	11 55	3 19	9 45	3 51	10 36	8 23	1 23	6 56	12 40	7 45
2	4	6	5 13	6 50	4 26	.....	4 25	10 40	4 50	11 25	9 19	2 17	7 49	1 44	8 35
2	5	7	5 14	6 48	5 12	0 45	5 25	11 29	5 42	.....	10 0	3 4	8 39	2 39	9 25
2	5	7	5 16	6 46	5 50	1 42	6 15	0 10	6 29	12 18	10 39	3 43	9 24	3 27	10 14
3	5	8	5 17	6 45	6 21	2 44	7 0	0 57	7 9	1 5	11 12	4 20	10 4	4 4	11 2
3	5	8	5 18	6 43	6 47	3 49	7 39	1 39	7 46	1 45	11 40	4 50	10 38	4 38	11 47
3	5	8	5 19	6 41	7 10	4 55	8 15	2 18	8 21	2 25	12 10	5 20	11 17	5 14	.....

Morning and Evening Stars, August 1947

Morning stars: MERCURY, to Aug. 29. Western elongation, Aug. 3. VENUS. Near the sun.

MARS. In western Gemini, Aug. 15. SATURN, beginning Aug. 5.

Evening stars: MERCURY, beginning Aug. 29. JUPITER. On meridian Aug. 8, at 6 p.m., L.C.T.

SATURN, to Aug. 5.

our Galaxy, to which the earth, the sun and other solar systems belong, is the *Milky*, an immense assemblage of stars, resembling other spiral galaxies seen far out in space. The diameter of the Milky Way is about 100,000 light-years.

SEPTEMBER, 1947

A.M. in Light Figures; P.M. in Bold

Sept.	Sun slow	a- factor moonrise			Local Civil Time				Local Civil Time				Local Civil Time				
					Sun- rise	Sun- set	Moon- rise	Moon- set	Sun- rise	Sun- set	Moon- rise	Moon- set	Sun- rise	Sun- set	Moon- rise	Moon- set	
		90°	105°	120°													
1 Mon.	m s	m	m	m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m
2 Tue.	0 16	1 2	3	5 36	6 24	7 19	6 19	5 32	6 28	7 22	6 13	5 26	6 33	7 26	6 7	5 30	6 16
3 Wed.	FAST	1 2	3	5 37	6 22	7 48	7 15	5 32	6 27	7 48	7 12	5 27	6 32	7 49	6 7	5 30	6 16
4 Thu.	0 22	1 2	3	5 37	6 21	8 17	8 11	5 33	6 26	8 15	8 12	5 28	6 30	8 12	8 9	5 31	6 17
5 Fri.	0 42	1 2	3	5 38	6 20	8 49	9 10	5 34	6 24	8 43	9 14	5 29	6 28	8 38	9 10	5 32	6 18
6 Sat.	1 1	1 3	4	5 38	6 19	9 24	10 10	5 34	6 23	9 14	10 18	5 30	6 27	9 5	10 11	5 33	6 19
7 Sun.	1 21	2 3	5	5 39	6 18	10 2	11 13	5 35	6 21	9 52	11 23	5 31	6 25	9 38	11 14	5 34	6 20
8 Mon.	1 41	2 4	6	5 40	6 16	10 48	12 19	5 36	6 20	10 35	12 31	5 32	6 24	10 19	12 15	5 35	6 21
9 Tue.	2 2	2 5	7	5 40	6 15	11 42	1 25	5 37	6 18	11 27	1 39	5 33	6 22	11 10	1 31	5 36	6 22
10 Wed.	2 22	3 6	9	5 41	6 14	.....	2 29	5 38	6 17	.....	2 45	5 34	6 20	.....	3 3	5 37	6 23
11 Thu.	2 43	3 6	9	5 41	6 13	0 44	3 29	5 38	6 16	0 28	3 44	5 35	6 19	0 10	4 4	5 38	6 24
12 Fri.	3 3	3 6	9	5 42	6 12	1 52	4 22	5 39	6 14	1 37	4 35	5 36	6 17	1 21	4 5	5 39	6 25
13 Sat.	3 24	3 6	10	5 42	6 10	3 2	5 9	5 40	6 13	2 50	5 19	5 37	6 16	2 37	5 6	5 40	6 26
14 Sun.	3 45	3 6	10	5 43	6 9	4 13	5 50	5 40	6 11	4 4	5 56	5 38	6 14	3 54	6 7	5 41	6 27
15 Mon.	4 6	3 6	9	5 43	6 8	5 22	6 26	5 41	6 10	5 16	6 29	5 39	6 12	5 10	6 8	5 42	6 28
16 Tue.	4 27	3 6	9	5 44	6 7	6 27	6 59	5 42	6 9	6 25	6 59	5 40	6 11	6 24	6 9	5 43	6 29
17 Wed.	4 49	3 6	9	5 44	6 5	7 31	7 32	5 43	6 7	7 33	7 28	5 41	6 9	7 34	6 10	5 44	6 30
18 Thu.	5 10	3 6	8	5 45	6 4	8 33	8 4	5 43	6 6	8 38	7 58	5 42	6 7	8 43	6 11	5 45	6 31
19 Fri.	5 31	3 6	8	5 46	6 3	9 34	8 38	5 44	6 4	9 42	8 30	5 43	6 6	9 51	6 12	5 46	6 32
20 Sat.	5 52	3 5	8	5 46	6 2	10 34	9 15	5 45	6 3	10 46	9 4	5 44	6 4	10 57	6 13	5 47	6 33
21 Sun.	6 14	3 5	8	5 46	6 1	11 34	9 56	5 46	6 1	11 47	9 44	5 44	6 2	12 2	6 14	5 48	6 34
22 Mon.	6 35	2 5	7	5 47	5 59	12 31	10 42	5 46	6 0	12 46	10 27	5 45	6 1	1 3	6 15	5 49	6 35
23 Tue.	6 56	2 4	6	5 48	5 58	1 26	11 31	5 47	5 58	1 41	11 16	5 46	5 59	1 59	6 16	5 50	6 36
24 Wed.	7 17	2 4	5	5 48	5 57	2 16	.....	5 48	5 57	2 30	.....	5 47	5 57	2 48	6 17	5 51	6 37
25 Thu.	7 38	2 3	5	5 49	5 56	3 1	0 24	5 48	5 56	3 14	0 9	5 48	5 56	3 31	6 18	5 52	6 38
26 Fri.	7 59	1 3	4	5 49	5 54	3 41	1 20	5 49	5 54	3 53	1 5	5 49	5 54	4 7	6 19	5 53	6 39
27 Sat.	8 20	1 2	3	5 50	5 53	4 17	2 16	5 50	5 53	4 26	2 4	5 50	5 52	4 38	6 20	5 54	6 40
28 Sun.	8 40	1 2	3	5 50	5 52	4 49	3 13	5 51	5 51	4 57	3 3	5 51	5 51	5 5	6 21	5 55	6 41
29 Mon.	9 1	1 2	3	5 51	5 50	5 20	4 10	5 52	5 50	5 25	4 3	5 52	5 49	5 30	6 22	5 56	6 42
30 Tue.	9 21	1 2	3	5 52	5 49	5 50	5 6	5 52	5 48	5 51	5 3	5 53	5 48	5 53	6 23	5 57	6 43
31 Wed.	9 41	1 2	3	5 52	5 48	6 19	6 4	5 53	5 47	6 18	6 4	5 54	5 46	6 16	6 24	5 58	6 44

Standard Time of Moon's Phases, September 1947

	Eastern			Central			Mountain			Pacific		
	d	h	m	d	h	m	d	h	m	d	h	m
Last Quarter.....	7	10	57 p.m.	7	9	57 p.m.	7	8	57 p.m.	7	7	57 p.m.
New Moon.....	14	2	28 p.m.	14	1	28 p.m.	14	12	28 p.m.	14	11	28 a.m.
First Quarter.....	22	0	42 a.m.	21	11	42 p.m.	21	10	42 p.m.	21	9	42 p.m.
Full Moon.....	30	1	41 a.m.	30	0	41 a.m.	29	11	41 p.m.	29	10	41 p.m.

S Doradus, a variable star, is one of the most luminous stars known. Being a variable its light fluctuates (from 8th to 9th magnitude), but its average brightness is 500.0 times that of the sun. It is so large that it would more than fill the space enclosed the earth's orbit.

SEPTEMBER, 1947

A.M. in Light Figures; P.M. in Bold

			Local Civil Time				Eastern Standard Time				Pacific Standard Time				Local Civil Time
			Latitude 45°				Tides New York, N. Y. (The Battery)				Tides San Francisco, Cal. (Golden Gate)				
a-factor moonset			Sun-rise	Sun-set	Moon-rise	Moon-set	High	Low	High	Low	High	Low	High	Low		Moon's upper transit
90°	105°	120°													
m	m	m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m
3	5	8	5 20	6 39	7 30	6 1	8 48	2 53	8 53	3 1	12 33	5 49	.....	5 53	0 31
3	5	8	5 22	6 37	7 50	7 8	9 21	3 25	9 26	3 35	0 0	6 16	12 57	6 29	1 13
3	5	8	5 23	6 36	8 9	8 15	9 50	3 55	9 57	4 10	0 36	6 46	1 19	7 12	1 56
3	5	8	5 24	6 34	8 30	9 24	10 25	4 22	10 35	4 43	1 26	7 17	1 43	8 2	2 40
3	6	9	5 25	6 32	8 54	10 35	11 5	4 48	11 19	5 22	2 23	7 53	2 10	9 0	3 25
3	6	9	5 26	6 30	9 24	11 49	11 53	5 20	.....	6 13	3 36	8 33	2 49	10 4	4 14
3	6	9	5 28	6 28	10 1	1 3	0 10	6 3	12 47	7 36	5 8	9 23	3 37	11 17	5 7
3	6	8	5 29	6 26	10 49	2 16	1 10	7 18	1 50	9 1	6 41	10 28	4 47	.....	6 4
3	5	7	5 30	6 24	11 50	3 23	2 20	9 1	3 3	10 9	7 56	0 31	6 2	11 46	7 5
2	4	6	5 31	6 22	.....	4 21	3 45	10 14	4 20	11 8	8 52	1 37	7 16	1 6	8 8
2	3	5	5 32	6 21	1 1	5 7	5 0	11 17	5 28	.....	9 37	2 35	8 23	2 17	9 10
1	3	4	5 34	6 19	2 21	5 43	6 2	0 2	6 25	12 14	10 18	3 27	9 24	3 17	10 10
1	2	4	5 35	6 17	3 43	6 12	6 55	0 53	7 17	1 9	10 55	4 12	10 19	4 12	11 6
1	2	3	5 36	6 15	5 3	6 37	7 44	1 42	8 5	2 0	11 30	4 54	11 14	5 3	11 58
1	2	3	5 37	6 13	6 22	6 59	8 30	2 28	8 52	2 48	12 5	5 32	.....	5 51	12 47
1	2	3	5 38	6 11	7 36	7 21	9 18	3 10	9 38	3 34	0 7	6 8	12 37	6 39	1 35
1	2	3	5 40	6 9	8 50	7 43	10 6	3 53	10 27	4 18	1 3	6 45	1 12	7 29	2 22
1	2	4	5 41	6 7	10 2	8 8	10 54	4 33	11 15	5 4	2 2	7 22	1 47	8 21	3 9
2	3	4	5 42	6 5	11 12	8 35	11 43	5 13	.....	5 53	3 2	8 1	2 23	9 17	3 57
2	3	5	5 43	6 4	12 20	9 8	0 5	6 0	12 32	6 50	4 16	8 47	3 4	10 18	4 47
2	4	6	5 44	6 2	1 23	9 49	0 55	6 55	1 20	8 0	5 37	9 47	4 0	11 25	5 37
2	4	7	5 46	6 0	2 40	10 36	1 49	8 6	2 10	9 6	6 50	11 4	5 8	.....	6 28
2	5	7	5 47	5 58	3 9	11 31	2 46	9 14	3 8	10 3	7 50	0 32	6 17	12 28	7 19
2	5	7	5 48	5 56	3 50	.....	3 50	10 12	4 10	10 54	8 39	1 30	7 19	1 39	8 8
3	5	8	5 49	5 54	4 23	0 31	4 53	11 3	5 6	11 39	9 19	2 18	8 15	2 23	8 56
3	5	8	5 50	5 52	4 51	1 36	5 45	11 50	5 55	.....	9 54	3 1	9 3	3 8	9 42
3	5	8	5 52	5 50	5 14	2 42	6 29	0 22	6 39	12 35	10 23	3 35	9 46	3 45	10 27
3	5	8	5 53	5 48	5 35	3 49	7 5	1 3	7 16	1 17	10 49	4 9	10 28	4 22	11 10
3	5	8	5 54	5 46	5 55	4 55	7 41	1 42	7 51	1 58	11 13	4 39	11 10	4 57	11 53
3	5	8	5 55	5 44	6 14	6 3	8 13	2 18	8 25	2 37	11 35	5 8	11 54	5 31	.....

Morning and Evening Stars, September 1947

Morning stars: VENUS, to Sept. 3. MARS. In Gemini and Cancer. Conjunction with Pollux, Sept. 19, Mars 6° south. SATURN. in Cancer and Leo.

Evening stars: MERCURY. Conjunction with Spica, Sept. 26, Mercury 1° north. VENUS, beginning Sept. 3. JUPITER. In Libra.

The most favorable time to observe our neighbor planet Mars is during an opposition, when the sun, the earth, and Mars are on a straight line. But due to Mars' eccentric orbit, the distance at opposition varies from about 34,600,000 miles to 62,900,000 miles. The most favorable opposition is in August 1956, when Mars will assume nearly the minimum distance.

OCTOBER, 1947

A.M. in Light Figures; P.M. in Bold

Oct.	Sun fast	a- factor moonrise			Local Civil Time				Local Civil Time				Local Civil Time			
					Latitude 30°				Latitude 35°				Latitude 40°			
		90°	105°	120°	Sun- rise	Sun- set	Moon- rise	Moon- set	Sun- rise	Sun- set	Moon- rise	Moon- set	Sun- rise	Sun- set	Moon- rise	Moon- set
1 Wed.	m s	m	m	m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m
2 Thu.	10 1	1	2	3	5 53	5 47	6 50	7 2	5 54	5 46	6 46	7 5	5 55	5 44	6 40	7
3 Fri.	10 20	1	3	4	5 53	5 46	7 24	8 3	5 55	5 44	7 16	8 9	5 56	5 43	7 7	8
4 Sat.	10 39	2	3	5	5 54	5 44	8 2	9 6	5 55	5 43	7 51	9 16	5 57	5 41	7 40	9
5 Sun.	10 58	2	4	5	5 54	5 43	8 45	10 12	5 56	5 42	8 33	10 23	5 58	5 39	8 18	10
	11 16	2	5	7	5 55	5 42	9 37	11 18	5 57	5 40	9 22	11 32	5 59	5 38	9 4	11
6 Mon.	11 35	3	5	8	5 56	5 41	10 35	12 23	5 58	5 39	10 19	12 38	6 0	5 38	10 1	12
7 Tue.	11 52	3	6	9	5 56	5 40	11 40	1 23	5 58	5 37	11 25	1 38	6 1	5 35	11 8	1
8 Wed.	12 10	3	6	9	5 57	5 38		2 17	5 59	5 36		2 31	6 2	5 33		2
9 Thu.	12 27	3	6	9	5 57	5 37	0 48	3 5	6 0	5 34	0 35	3 15	6 3	5 31	0 21	3
10 Fri.	12 43	3	6	9	5 58	5 36	1 56	3 46	6 1	5 33	1 47	3 54	6 4	5 30	1 36	4
11 Sat.	12 59	3	6	9	5 58	5 35	3 5	4 23	6 2	5 32	2 57	4 27	6 5	5 28	2 50	4
12 Sun.	13 15	3	6	9	5 59	5 34	4 10	4 56	6 2	5 30	4 6	4 57	6 6	5 27	4 3	4
13 Mon.	13 30	3	6	9	6 0	5 33	5 13	5 28	6 3	5 29	5 14	5 26	6 7	5 25	5 14	5
14 Tue.	13 44	3	6	9	6 0	5 32	6 16	6 0	6 4	5 28	6 20	5 55	6 8	5 24	6 23	5
15 Wed.	13 58	3	6	8	6 1	5 30	7 18	6 33	6 5	5 27	7 24	6 26	6 9	5 22	7 32	6
16 Thu.	14 11	3	6	8	6 2	5 29	8 20	7 10	6 6	5 25	8 28	6 59	6 10	5 21	8 40	6
17 Fri.	14 24	3	5	8	6 2	5 28	9 20	7 50	6 7	5 24	9 32	7 37	6 11	5 19	9 46	7
18 Sat.	14 37	3	5	8	6 3	5 27	10 20	8 33	6 8	5 23	10 33	8 19	6 12	5 18	10 50	8
19 Sun.	14 48	2	4	7	6 4	5 26	11 16	9 22	6 8	5 22	11 31	9 6	6 13	5 16	11 49	8
20 Mon.	15 0	2	4	6	6 4	5 25	12 8	10 13	6 9	5 20	12 24	9 58	6 14	5 15	12 42	9
21 Tue.	15 10	2	3	5	6 5	5 24	12 56	11 8	6 10	5 19	1 10	10 54	6 16	5 13	1 27	10
22 Wed.	15 20	1	3	4	6 6	5 23	1 38		6 11	5 18	1 50	11 52	6 17	5 12	2 6	11
23 Thu.	15 29	1	2	4	6 6	5 22	2 15	0 4	6 12	5 17	2 26		6 18	5 11	2 38	
24 Fri.	15 38	1	2	3	6 7	5 21	2 49	1 1	6 13	5 16	2 57	0 51	6 19	5 9	3 6	0
25 Sat.	15 46	1	2	3	6 8	5 20	3 20	1 57	6 14	5 14	3 26	1 50	6 20	5 8	3 32	1
26 Sun.	15 53	1	2	3	6 9	5 19	3 49	2 54	6 14	5 13	3 52	2 49	6 21	5 7	3 56	2
27 Mon.	15 59	1	2	3	6 10	5 18	4 19	3 51	6 15	5 12	4 19	3 50	6 22	5 5	4 19	3
28 Tue.	16 5	1	2	3	6 10	5 17	4 50	4 49	6 16	5 11	4 46	4 51	6 23	5 4	4 42	4
29 Wed.	16 10	1	2	4	6 11	5 16	5 22	5 50	6 17	5 10	5 16	5 55	6 24	5 3	5 9	5
30 Thu.	16 14	1	3	4	6 12	5 15	6 0	6 54	6 18	5 9	5 50	7 2	6 26	5 2	5 39	6
31 Fri.	16 18	2	3	5	6 12	5 15	6 42	8 0	6 19	5 8	6 30	8 12	6 27	5 0	6 16	7

Standard Time of Moon's Phases, October 1947

	Eastern			Central			Mountain			Pacific		
	d	h	m	d	h	m	d	h	m	d	h	m
Last Quarter.....	7	5	29 a.m.	7	4	29 a.m.	7	3	29 a.m.	7	2	29 a.m.
New Moon.....	14	1	10 a.m.	14	0	10 a.m.	13	11	10 p.m.	13	10	10 p.m.
First Quarter.....	21	8	11 p.m.	21	7	11 p.m.	21	6	11 p.m.	21	5	11 p.m.
Full Moon.....	29	3	7 p.m.	29	2	7 p.m.	29	1	7 p.m.	29	12	7 p.m.

The asterisks are barren worlds, without air, water, or living things. Thousands of the are only a few miles in diameter and many are smaller.

OCTOBER, 1947

A.M. in Light Figures; P.M. in Bold

			Local Civil Time				Eastern Standard Time				Pacific Standard Time				Local Civil Time
			Latitude 45°				Tides New York, N. Y. (The Battery)				Tides San Francisco, Cal. (Golden Gate)				
a-factor moonset			Sun-rise	Sun-set	Moon-rise	Moon-set	High	Low	High	Low	High	Low	High	Low		Moon's upper transit
90°	105°	120°													
m	m	m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m
3	6	8	5 56	5 43	6 35	7 13	8 43	2 51	8 56	3 14	11 56	5 37	.....	6 11	0 37
3	6	9	5 58	5 41	6 58	8 25	9 16	3 23	9 34	3 50	0 41	6 10	12 17	6 55	1 22
3	6	9	5 59	5 39	7 26	9 39	9 54	3 53	10 15	4 30	1 35	6 41	12 45	7 43	2 11
3	6	9	6 0	5 37	8 0	10 55	10 40	4 26	11 9	5 12	2 38	7 18	1 20	8 37	3 3
3	6	8	6 1	5 35	8 44	12 9	11 35	5 3	.....	6 9	3 52	8 5	2 3	9 42	3 59
3	5	8	6 3	5 33	9 41	1 18	0 10	5 52	12 39	7 28	5 19	9 10	3 0	10 53	4 58
2	4	7	6 4	5 32	10 47	2 17	1 19	7 23	1 45	8 47	6 37	10 25	4 24	.....	6 0
2	4	5	6 5	5 30	.....	3 5	2 33	8 57	2 56	9 53	7 37	0 5	5 50	11 56	7 1
2	3	4	6 6	5 28	0 3	3 43	3 41	10 8	4 9	10 50	8 23	1 10	7 11	1 18	8 0
1	2	4	6 8	5 26	1 22	4 13	4 50	11 7	5 14	11 41	9 5	2 8	8 23	2 24	8 56
1	2	3	6 9	5 24	2 41	4 39	5 47	12 3	6 10	.....	9 40	2 57	9 24	3 22	9 48
1	2	3	6 10	5 22	3 58	5 1	6 39	0 30	6 59	12 53	10 15	3 40	10 22	4 11	10 37
1	2	3	6 12	5 21	5 14	5 22	7 25	1 16	7 44	1 43	10 48	4 19	11 16	4 56	11 25
1	2	3	6 13	5 19	6 28	5 44	8 8	2 0	8 29	2 29	11 18	4 58	.....	5 40	12 11
1	2	4	6 14	5 17	7 41	6 6	8 51	2 43	9 13	3 13	0 13	5 32	11 48	6 23	12 59
1	3	4	6 16	5 15	8 53	6 33	9 34	3 23	9 57	3 56	1 6	6 7	12 19	7 7	1 47
2	3	5	6 17	5 14	10 3	7 4	10 20	4 2	10 45	4 38	2 3	6 44	12 50	7 52	2 37
2	4	6	6 18	5 12	11 10	7 41	11 5	4 40	11 35	5 24	3 2	7 26	1 25	8 41	3 28
2	4	6	6 19	5 10	12 10	8 27	11 52	5 20	.....	6 14	4 12	8 14	2 4	9 35	4 19
2	5	7	6 21	5 8	1 4	9 19	0 27	6 7	12 40	7 16	5 18	9 20	2 53	10 35	5 11
3	5	7	6 22	5 7	1 43	10 18	1 19	7 18	1 29	8 25	6 21	10 38	4 8	11 35	6 1
3	5	8	6 23	5 5	2 23	11 21	2 15	8 36	2 22	9 26	7 15	12 11	5 30	.....	6 49
3	5	8	6 25	5 4	2 53	.....	3 14	9 40	3 21	10 17	7 56	0 32	6 42	1 18	7 36
3	5	8	6 26	5 2	3 18	0 26	4 12	10 31	4 20	11 1	8 31	1 22	7 41	2 6	8 20
3	5	8	6 28	5 0	3 39	1 32	5 5	11 19	5 15	11 43	9 3	2 5	8 40	2 45	9 4
3	5	8	6 29	4 59	3 59	2 39	5 48	12 3	6 1	.....	9 31	2 42	9 28	3 22	9 47
3	5	8	6 30	4 57	4 18	3 46	6 28	0 23	6 40	12 46	9 55	3 18	10 15	4 0	10 30
3	5	8	6 32	4 56	4 38	4 56	7 3	1 1	7 18	1 29	10 18	3 51	11 4	4 36	11 16
3	6	9	6 33	4 54	5 0	6 7	7 37	1 39	7 55	2 11	10 42	4 25	11 55	5 15	.....
3	6	9	6 34	4 53	5 26	7 22	8 12	2 17	8 34	2 53	11 6	4 59	.....	5 56	0 4
3	6	9	6 36	4 51	5 59	8 39	8 50	2 54	9 16	3 34	0 49	5 35	11 33	6 40	0 55

Morning and Evening Stars, October 1948

Morning stars: MARS. In Cancer. On meridian Oct. 21 at 7 a.m., L.C.T. SATURN. In Leo. On meridian Oct. 15, at 8 a.m., L.C.T.

Evening stars: MERCURY. Eastern elongation, Oct. 13. VENUS. In Virgo, east of Spica, Oct. 15, evening sky. JUPITER. In Libra, near Scorpius.

The crater-formation *Aristarchus* is the brightest object on the moon's surface. It is brilliant that it can often be seen when the entire region around it is in shadow, that when it is nighttime there.

NOVEMBER, 1947

A.M. in Light Figures; P.M. in Bold

Nov.	Sun fast	a- factor moonrise			Local Civil Time Latitude 30°				Local Civil Time Latitude 35°				Local Civil Time Latitude 40°			
					Sun- rise	Sun- set	Moon- rise	Moon- set	Sun- rise	Sun- set	Moon- rise	Moon- set	Sun- rise	Sun- set	Moon- rise	Moon- set
		90°	105°	120°												
	m s	m	m	m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m
1 Sat.	16 20	2	4	7	6 13	5 14	7 32	9 8	6 20	5 7	7 17	9 22	6 28	4 59	7 0	9 38
2 Sun.	16 22	3	5	8	6 14	5 13	8 29	10 16	6 21	5 6	8 13	10 31	6 29	4 58	7 55	10 45
3 Mon.	16 23	3	6	9	6 15	5 12	9 33	11 19	6 22	5 5	9 17	11 34	6 30	4 57	9 0	11 52
4 Tue.	16 23	3	6	9	6 16	5 12	10 39	12 15	6 23	5 4	10 26	12 30	6 31	4 56	10 10	12 40
5 Wed.	16 23	3	6	9	6 16	5 11	11 48	1 4	6 24	5 3	11 38	1 16	6 32	4 54	11 24	1 30
6 Thu.	16 22	3	6	9	6 17	5 10	.....	1 46	6 25	5 2	.....	1 55	6 34	4 53	.....	2 1
7 Fri.	16 20	3	6	9	6 18	5 9	0 55	2 23	6 26	5 1	0 47	2 29	6 35	4 52	0 38	2 24
8 Sat.	16 17	3	6	9	6 19	5 9	1 59	2 57	6 27	5 0	1 55	2 59	6 36	4 51	1 50	3 1
9 Sun.	16 13	3	6	8	6 19	5 8	3 2	3 28	6 28	5 0	3 1	3 28	6 37	4 50	2 59	3 2
10 Mon.	16 8	3	6	8	6 20	5 7	4 3	3 59	6 29	4 59	4 5	3 56	6 38	4 49	4 7	3 5
11 Tue.	16 2	3	6	8	6 21	5 7	5 4	4 31	6 30	4 58	5 9	4 24	6 39	4 48	5 15	4 10
12 Wed.	15 55	3	6	8	6 22	5 6	6 5	5 6	6 31	4 57	6 13	4 56	6 40	4 47	6 23	4 40
13 Thu.	15 48	3	5	8	6 23	5 6	7 6	5 44	6 32	4 57	7 17	5 32	6 42	4 46	7 30	5 11
14 Fri.	15 40	3	5	8	6 24	5 5	8 6	6 26	6 33	4 56	8 20	6 11	6 43	4 46	8 35	5 5
15 Sat.	15 31	2	5	7	6 24	5 4	9 5	7 12	6 34	4 55	9 20	6 57	6 44	4 45	9 37	6 3
16 Sun.	15 21	2	4	6	6 25	5 4	9 59	8 3	6 34	4 55	10 15	7 48	6 45	4 44	10 33	7 3
17 Mon.	15 10	2	4	5	6 26	5 4	10 49	8 57	6 35	4 54	11 4	8 43	6 46	4 43	11 22	8 2
18 Tue.	14 58	2	3	4	6 27	5 3	11 33	9 53	6 36	4 53	11 47	9 40	6 47	4 42	12 3	9 2
19 Wed.	14 46	1	2	4	6 28	5 3	12 12	10 50	6 37	4 53	12 24	10 38	6 48	4 42	12 38	10 2
20 Thu.	14 33	1	2	3	6 28	5 2	12 48	11 45	6 38	4 52	12 57	11 37	6 50	4 41	1 7	11 2
21 Fri.	14 19	1	2	3	6 29	5 2	1 19	.....	6 39	4 52	1 26	.....	6 51	4 40	1 33	.....
22 Sat.	14 4	1	2	3	6 30	5 2	1 48	0 41	6 40	4 51	1 52	0 35	6 52	4 40	1 57	0 2
23 Sun.	13 48	1	2	3	6 31	5 1	2 17	1 37	6 41	4 51	2 18	1 33	6 53	4 39	2 20	1 3
24 Mon.	13 32	1	2	3	6 32	5 1	2 46	2 33	6 42	4 50	2 45	2 34	6 54	4 39	2 43	2 3
25 Tue.	13 15	1	2	3	6 33	5 1	3 18	3 33	6 43	4 50	3 13	3 36	6 55	4 38	3 8	3 4
26 Wed.	12 57	1	3	4	6 34	5 1	3 53	4 35	6 44	4 50	3 44	4 41	6 56	4 38	3 36	4 4
27 Thu.	12 38	2	3	5	6 34	5 0	4 34	5 40	6 45	4 50	4 22	5 51	6 57	4 37	4 9	6
28 Fri.	12 19	2	4	6	6 35	5 0	5 21	6 50	6 46	4 49	5 7	7 2	6 58	4 37	4 51	7 1
29 Sat.	11 59	3	5	8	6 36	5 0	6 17	7 59	6 47	4 49	6 2	8 15	7 0	4 36	5 44	8 3
30 Sun.	11 38	3	6	9	6 37	5 0	7 20	9 7	6 48	4 49	7 5	9 23	7 1	4 36	6 47	9 4

Standard Time of Moon's Phases, November 1947

	Eastern			Central			Mountain			Pacific		
	d	h	m	d	h	m	d	h	m	d	h	m
Last Quarter.....	5	12	3 p.m.	5	11	3 a.m.	5	10	3 a.m.	5	9	3 a.m.
New Moon.....	12	3	1 p.m.	12	2	1 p.m.	12	1	1 p.m.	12	12	1 p.m.
First Quarter.....	20	4	44 p.m.	20	3	44 p.m.	20	2	44 p.m.	20	1	44 p.m.
Full Moon.....	28	3	45 a.m.	28	2	45 a.m.	28	1	45 a.m.	28	0	45 a.m.

Comets are made of extremely light, tenuous material. *Brook's Comet* of 1886 passed close to Jupiter—even through Jupiter's system of satellites—but effected no change in the planet's orbit, whereas the period of the comet's orbit around the sun was altered from 29 years to 7 years.

NOVEMBER, 1947

A.M. in Light Figures; P.M. in Bold

				Local Civil Time				Eastern Standard Time				Pacific Standard Time				Local Civil Time
				Latitude 45°				New York, N. Y. (The Battery)				San Francisco, Cal. (Golden Gate)				
				Tides				Tides				Tides				
				New York, N. Y. (The Battery)				San Francisco, Cal. (Golden Gate)								
Nov.	a-factor moonset			Sun-rise	Sun-set	Moon-rise	Moon-set	High	Low	High	Low	High	Low	High	Low	Moon's upper transit
	90°	105°	120°													
	m	m	m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m
1	3	6	9	6 37	4 50	6 41	9 57	9 34	3 32	10 8	4 19	1 44	6 10	12 7	7 29	1 52
2	3	5	8	6 38	4 48	7 34	11 10	10 28	4 12	11 11	5 7	2 48	7 0	12 46	8 23	2 52
3	2	5	7	6 40	4 47	8 38	12 13	11 31	4 58	6 5	3 59	7 55	1 39	9 25	3 54	3 54
4	2	4	6	6 41	4 46	9 52	1 5	0 17	6 0	12 35	7 17	5 10	9 2	2 47	10 30	4 56
5	2	3	5	6 42	4 44	11 9	1 46	1 21	7 26	1 40	8 30	6 14	10 34	4 12	11 38	5 55
6	1	3	4	6 44	4 43	.....	2 18	2 25	8 49	2 45	9 34	7 3	12 9	5 44	.....	6 51
7	1	2	3	6 45	4 42	0 27	2 44	3 30	9 56	3 52	10 28	7 46	0 37	7 8	1 26	7 43
8	1	2	3	6 47	4 40	1 43	3 6	4 33	10 53	4 55	11 17	8 25	1 32	8 24	2 27	8 32
9	1	2	3	6 48	4 39	2 57	3 27	5 29	11 46	5 50	.....	9 2	2 19	9 27	3 19	9 19
10	1	2	3	6 49	4 38	4 10	3 47	6 18	0 4	6 39	12 36	9 35	3 3	10 26	4 4	10 5
11	1	2	3	6 51	4 37	5 22	4 9	7 3	0 50	7 24	1 24	10 7	3 43	11 23	4 47	10 51
12	1	3	4	6 52	4 36	6 34	4 33	7 45	1 34	8 6	2 10	10 38	4 21	.....	5 26	11 38
13	2	3	4	6 53	4 34	7 45	5 2	8 26	2 16	8 48	2 54	0 14	4 57	11 6	6 7	12 27
14	2	3	5	6 55	4 33	8 54	5 36	9 6	2 57	9 32	3 35	1 8	5 33	11 36	6 46	1 17
15	2	4	6	6 56	4 32	9 58	6 18	9 47	3 35	10 19	4 17	2 0	6 12	12 7	7 27	2 9
16	2	4	7	6 58	4 31	10 54	7 8	10 30	4 13	11 9	4 59	2 53	6 56	12 39	8 10	3 1
17	2	5	7	6 59	4 30	11 43	8 4	11 15	4 50	11 59	5 43	3 52	7 50	1 20	8 57	3 52
18	3	5	8	7 0	4 29	12 23	9 6	12 1	5 30	.....	6 36	4 47	8 52	2 7	9 49	4 42
19	3	5	8	7 2	4 28	12 54	10 11	0 50	6 25	12 48	7 37	5 41	10 9	3 6	10 40	5 29
20	3	5	8	7 3	4 28	1 20	11 16	1 38	7 45	1 35	8 38	6 26	11 35	4 33	11 29	6 14
21	3	5	8	7 4	4 27	1 42	.....	2 28	8 56	2 26	9 30	7 5	12 42	5 55	.....	6 57
22	3	5	8	7 6	4 26	2 3	0 21	3 20	9 53	3 22	10 16	7 38	0 18	7 6	1 35	7 39
23	3	5	8	7 7	4 25	2 22	1 27	4 12	10 41	4 20	10 57	8 8	1 3	8 12	2 18	8 22
24	3	5	8	7 8	4 24	2 40	2 34	5 1	11 27	5 13	11 38	8 35	1 45	9 11	2 57	9 5
25	3	6	8	7 9	4 24	3 2	3 44	5 45	12 14	6 2	.....	9 0	2 25	10 7	3 36	9 52
26	3	6	9	7 11	4 23	3 26	4 58	6 26	0 19	6 45	12 59	9 28	3 3	11 1	4 19	10 42
27	3	6	9	7 12	4 22	3 55	6 15	7 5	1 2	7 28	1 46	9 58	3 43	11 58	4 58	11 37
28	3	6	9	7 13	4 22	4 33	7 34	7 47	1 46	8 15	2 34	10 30	4 24	.....	5 42	.....
29	3	6	9	7 14	4 21	5 22	8 52	8 32	2 30	9 5	3 20	0 50	5 5	11 5	6 29	0 37
30	3	5	8	7 16	4 21	6 25	10 2	9 24	3 16	10 3	4 8	1 46	5 52	11 46	7 18	1 41

Morning and Evening Stars, November 1947

Morning stars: MERCURY, beginning Nov. 5. Western elongation, Nov. 22. MARS. In Leo.
Conjunction with Regulus, Nov. 27, Mars 2° north. SATURN. On meridian Nov. 16, at 6 a.m., L.C.T.

Evening stars: MERCURY, to Nov. 5. VENUS. In Ophiuchus, Nov. 15. Conjunction with Antares, Nov. 13, Venus 4° north. JUPITER. In Scorpius, near the sun.

De Chéseaux's Comet of 1744 was extraordinary in that it had six tails. Rising before the sun in March they were an interesting sight. Borelly's Comet of 1903 likely has the record: it showed nine tails on a photographic plate but they were faint and could not be seen with the unaided eye.

DECEMBER, 1947

A.M. in Light Figures; P.M. in Bold

Dec.	Sun fast	a- factor moonrise			Local Civil Time				Local Civil Time				Local Civil Time			
					Latitude 30°				Latitude 35°				Latitude 40°			
		90°	105°	120°	Sun- rise	Sun- set	Moon- rise	Moon- set	Sun- rise	Sun- set	Moon- rise	Moon- set	Sun- rise	Sun- set	Moon- rise	Moon- set
	m s	m	m	m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m
1 Mon.	11 17	3	6	9	6 38	5 0	8 29	10 8	6 49	4 49	8 15	10 23	7 2	4 36	7 58	10 41
2 Tue.	10 55	3	6	9	6 38	5 0	9 38	11 2	6 50	4 48	9 27	11 14	7 3	4 36	9 14	11 29
3 Wed.	10 32	3	6	9	6 39	5 0	10 48	11 46	6 51	4 48	10 38	11 56	7 4	4 35	10 28	12 8
4 Thu.	10 8	3	6	9	6 40	5 0	11 53	12 25	6 51	4 48	11 47	12 32	7 5	4 35	11 41	12 40
5 Fri.	9 44	3	6	9	6 41	5 0	.....	1 0	6 52	4 48	.....	1 3	7 6	4 35	.....	1 7
6 Sat.	9 19	3	6	9	6 42	5 0	0 56	1 31	6 53	4 48	0 53	1 32	7 7	4 35	0 50	1 32
7 Sun.	8 54	3	6	8	6 42	5 0	1 56	2 1	6 54	4 48	1 57	1 59	7 8	4 35	1 59	1 56
8 Mon.	8 28	3	6	8	6 43	5 0	2 56	2 33	6 55	4 48	3 0	2 27	7 8	4 35	3 5	2 20
9 Tue.	8 2	3	5	8	6 44	5 0	3 55	3 5	6 56	4 48	4 3	2 57	7 9	4 35	4 12	2 47
10 Wed.	7 35	3	5	8	6 44	5 0	4 55	3 41	6 56	4 48	5 5	3 31	7 10	4 35	5 17	3 18
11 Thu.	7 8	3	5	8	6 45	5 1	5 55	4 22	6 57	4 49	6 8	4 9	7 11	4 35	6 22	3 52
12 Fri.	6 41	3	5	7	6 46	5 1	6 54	5 6	6 58	4 49	7 9	4 52	7 12	4 35	7 25	4 34
13 Sat.	6 13	2	4	7	6 46	5 1	7 50	5 56	6 59	4 49	8 6	5 40	7 13	4 35	8 24	5 22
14 Sun.	5 44	2	4	6	6 47	5 2	8 42	6 48	6 59	4 49	8 58	6 34	7 13	4 35	9 16	6 16
15 Mon.	5 16	2	3	5	6 48	5 2	9 29	7 44	7 0	4 50	9 43	7 30	7 14	4 36	10 0	7 13
16 Tue.	4 47	1	3	4	6 48	5 2	10 10	8 40	7 1	4 50	10 22	8 28	7 15	4 36	10 37	8 14
17 Wed.	4 17	1	2	3	6 49	5 2	10 46	9 35	7 1	4 50	10 56	9 26	7 16	4 36	11 8	9 15
18 Thu.	3 48	1	2	3	6 50	5 3	11 18	10 30	7 2	4 50	11 26	10 24	7 16	4 36	11 35	10 16
19 Fri.	3 19	1	2	3	6 50	5 3	11 48	11 25	7 3	4 51	11 53	11 21	7 17	4 37	11 59	11 17
20 Sat.	2 49	1	2	3	6 51	5 4	12 17	.....	7 3	4 51	12 19	.....	7 17	4 37	12 22	.....
21 Sun.	2 19	1	2	3	6 51	5 4	12 45	0 20	7 4	4 52	12 44	0 19	7 18	4 38	12 44	0 18
22 Mon.	1 49	1	2	3	6 52	5 5	1 14	1 17	7 4	4 52	1 11	1 19	7 18	4 38	1 6	1 21
23 Tue.	1 19	1	2	4	6 52	5 5	1 46	2 15	7 5	4 53	1 40	2 21	7 19	4 39	1 32	2 26
24 Wed.	0 49	1	3	4	6 53	5 6	2 23	3 18	7 5	4 53	2 13	3 26	7 19	4 39	2 3	3 35
25 Thu.	0 20	2	4	5	6 53	5 6	3 6	4 25	7 6	4 54	2 54	4 36	7 20	4 40	2 40	4 49
26 Fri.	SLOW	2	5	7	6 54	5 7	3 58	5 35	7 6	4 54	3 44	5 48	7 20	4 40	3 27	6 4
27 Sat.	0 40	3	6	9	6 54	5 7	4 59	6 44	7 6	4 55	4 44	7 0	7 21	4 41	4 25	7 17
28 Sun.	1 9	3	6	9	6 55	5 8	6 8	7 51	7 7	4 56	5 53	8 6	7 21	4 42	5 36	8 24
29 Mon.	1 39	3	7	10	6 55	5 9	7 21	8 50	7 7	4 56	7 8	9 3	7 21	4 42	6 52	9 20
30 Tue.	2 8	3	6	10	6 55	5 9	8 33	9 40	7 8	4 57	8 23	9 52	7 22	4 43	8 11	10 4
31 Wed.	2 37	3	6	9	6 56	5 10	9 42	10 23	7 8	4 58	9 36	10 31	7 22	4 44	9 28	10 40

Standard Time of Moon's Phases, December 1947

	Eastern			Central			Mountain			Pacific		
	d	h	m	d	h	m	d	h	m	d	h	m
Last Quarter.....	4	7	55 p.m.	4	6	55 p.m.	4	5	55 p.m.	4	4	55 p.m.
New Moon.....	12	7	53 a.m.	12	6	53 a.m.	12	5	53 a.m.	12	4	53 a.m.
First Quarter.....	20	12	43 p.m.	20	11	43 a.m.	20	10	43 a.m.	20	9	43 a.m.
Full Moon.....	27	3	27 p.m.	27	2	27 p.m.	27	1	27 p.m.	27	12	27 p.m.

From actual count combined with estimate, it is calculated that there are 100,000,000 extra-galactic nebulae within reach of our telescopes.

DECEMBER, 1947

A.M. in Light Figures; P.M. in Bold

Dec.				Local Civil Time				Eastern Standard Time				Pacific Standard Time				Local Civil Time
				Latitude 45°				Tides				Tides				
	a-factor moonset							New York, N. Y. (The Battery)				San Francisco, Cal. (Golden Gate)				
	90°	105°	120°	Sun-rise	Sun-set	Moon-rise	Moon-set	High	Low	High	Low	High	Low	High	Low	Moon's upper transit
	m	m	m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m
1	2	4	6	7 17	4 20	7 38	11 0	10 22	4 5	11 9	4 58	2 44	6 46	12 37	8 14	2 46
2	2	3	5	7 18	4 20	8 57	11 46	11 26	4 57	.....	5 54	3 43	7 49	1 33	9 8	3 48
3	1	3	4	7 19	4 20	10 16	12 21	0 11	6 0	12 28	6 58	4 40	9 6	2 46	10 5	4 47
4	1	2	3	7 20	4 19	11 34	12 49	1 11	7 16	1 28	8 6	5 36	10 35	4 5	11 3	5 41
5	1	2	3	7 21	4 19	.....	1 12	2 10	8 32	2 28	9 6	6 22	12 4	5 39	.....	6 30
6	1	2	3	7 22	4 19	0 48	1 33	3 9	9 37	3 28	10 1	7 3	0 0	7 4	1 19	7 17
7	1	2	3	7 24	4 19	2 0	1 53	4 8	10 34	4 29	10 51	7 43	0 50	8 20	2 19	8 3
8	1	2	3	7 25	4 18	3 11	2 14	5 5	11 27	5 26	11 38	8 20	1 37	9 28	3 10	8 47
9	1	2	4	7 26	4 18	4 21	2 36	5 56	12 16	6 17	.....	8 56	2 24	10 29	3 54	9 33
10	1	3	4	7 27	4 18	5 31	3 3	6 42	0 23	7 3	1 4	9 29	3 7	11 23	4 35	10 21
11	2	3	5	7 27	4 18	6 40	3 35	7 24	1 9	7 45	1 50	10 5	3 48	.....	5 12	11 10
12	2	4	6	7 28	4 18	7 46	4 13	8 4	1 52	8 29	2 34	0 16	4 28	10 35	5 50	12 1
13	2	4	7	7 29	4 18	8 45	5 0	8 42	2 34	9 12	3 16	1 3	5 8	11 8	6 28	12 53
14	2	5	7	7 30	4 19	9 37	5 54	9 22	3 14	9 57	3 57	1 45	5 47	11 40	7 5	1 45
15	3	5	7	7 31	4 19	10 19	6 54	10 2	3 52	10 45	4 36	2 30	6 32	12 14	7 44	2 35
16	3	5	8	7 32	4 19	10 54	7 58	10 44	4 28	11 33	5 16	3 17	7 25	12 50	8 23	3 23
17	3	5	8	7 32	4 19	11 22	9 2	11 26	5 4	.....	5 56	4 3	8 24	1 35	9 4	4 8
18	3	5	8	7 33	4 20	11 45	10 7	0 16	5 44	12 7	6 42	4 45	9 24	2 28	9 47	4 52
19	3	5	8	7 34	4 20	12 6	11 11	0 58	6 40	12 47	7 36	5 24	10 36	3 38	10 29	5 33
20	3	5	8	7 34	4 20	12 25	.....	1 39	7 56	1 30	8 32	6 0	11 46	5 7	11 15	6 15
21	3	5	8	7 35	4 21	12 43	0 16	2 23	9 4	2 19	9 23	6 34	12 49	6 32	.....	6 57
22	3	5	8	7 35	4 21	1 2	1 23	3 11	10 0	3 16	10 9	7 5	0 2	7 52	1 41	7 41
23	3	5	8	7 36	4 22	1 24	2 33	4 5	10 51	4 20	10 54	7 36	0 47	9 1	2 28	8 28
24	3	6	8	7 36	4 22	1 50	3 47	4 59	11 41	5 21	11 41	8 8	1 36	10 2	3 13	9 19
25	3	6	9	7 37	4 23	2 24	5 4	5 52	12 33	6 17	.....	8 46	2 22	10 58	3 58	10 17
26	3	6	9	7 37	4 24	3 7	6 23	6 40	0 31	7 8	1 24	9 25	3 11	11 51	4 43	11 19
27	3	6	9	7 37	4 24	4 4	7 39	7 30	1 22	8 0	2 16	10 8	3 58	.....	5 30	.....
28	2	5	7	7 38	4 25	5 14	8 45	8 20	2 14	8 54	3 5	0 41	4 51	10 53	6 17	0 25
29	2	4	6	7 38	4 26	6 34	9 38	9 15	3 5	9 53	3 55	1 32	5 44	11 41	7 5	1 32
30	2	3	5	7 38	4 26	7 58	10 19	10 14	3 57	10 55	4 43	2 20	6 42	12 36	7 55	2 34
31	1	2	4	7 38	4 27	9 19	10 51	11 14	4 50	11 55	5 35	3 10	7 47	1 37	8 43	3 32

Morning and Evening Stars, December 1947

Morning stars: MERCURY. MARS. In Leo. On meridian Dec. 14 at 5 a.m., L.C.T. JUPITER, beginning Dec. 1. SATURN. In Leo. On meridian Dec. 2, at 5 a.m., L.C.T.

Evening star: VENUS. In Sagittarius, Dec. 15.

Mira, *Betelgeuse*, *Antares*, *Alpha Herculis*, *Beta Pegasi*, and *Epsilon Aurigae* are the largest stars known. The diameters of the first 5 are between 100 and 500 times that of our sun. The diameter of the last one is immense; it is calculated from the light-curve as 2800 times the sun's.

Standard Time and Time Differences

Standard time, the base used for telling time throughout the world, has been adopted by action of the individual nations. The United States took legislative action in 1918 to recognize standard time after it had been used here for 35 years.

The International Meridian Conference, held in 1884 at Washington, D. C., established the meridian passing through Greenwich, England, as the prime meridian, from which the world's time was to be reckoned. For every 15 degrees of longitude, east or west of Greenwich a time change of one hour results.

TIME ZONES. The 15-degree measurement, divides Europe into three time zones—Greenwich, Mid-European (1 hour faster) and East-European (2 hours faster). The United States is divided into four time zones—Eastern, Central, Mountain, and Pacific. The Eastern Time Belt is 75 degrees west of (and 5 hours slower than) Greenwich; the Central Zone, 6 hours slower, the Mountain Zone, 7 hours and the Pacific Zone, 8 hours slower. When it is 10 A.M. in Greenwich it is 5 A.M. in New York, 4 A.M. in Chicago, Ill., 3 A.M. in Denver, Col. and 2 A.M. in San Francisco, Calif.

DAYLIGHT SAVING TIME was begun during World War I. It called for the advancement of clocks by one hour in order to conserve fuel and gain more use of daylight. During World War II daylight saving time was called "war time" and was used all year instead of in summer only. With the exception of five states, Connecticut,

Massachusetts, New Hampshire, and New Jersey, there is no law compelling any community to use daylight saving time. Each locality may decide the issue for itself.

The International Date Line is 180 degrees from Greenwich, or halfway around the world. A person traveling to Australia from the United States must add a day when crossing the line and must subtract a day when traveling in the opposite direction. The International Date Line does not follow the 180th meridian throughout its length. In order to keep all islands of certain groups on the same day of the week, it was necessary to move it off the 180th meridian. It turns east to keep Alaska to the east and Asia to the west. It then turns west to keep the Aleutians to the east. The line then follows its normal 180-degree course until just below the equator, where it swerves to include all of the Samoan Islands to the east and the Fiji Islands to the west. Thereafter, it stays on 172° 30' until in the region of New Zealand, where it resumes the 180° meridian.

ARMY-NAVY TIME. The 24-hour clock system was adopted by the U. S. Army in 1942. The Navy had already copied this system from the British many years before. The day starts at midnight and the hours around the clock are numbered consecutively. From midnight until 12:59 P.M. the hours correspond to the normal system of telling time. Four A.M. is read as 0400, and 12:59 P.M. is 1259; 1 P.M., however, is 1300; 11 P.M. is read as 2300. Odd hours, such as 6:37 P.M. are as 1837.

Time Differences

Twelve o'clock Noon United States Eastern Standard Time Compared with Clocks in Foreign Cities:

Aden	8:00 P.M.	Hamburg	6:00 P.M.	Manila	1:00 A.M.*
Alexandria	7:00 P.M.	Havana	12:00 NOON	Melbourne	3:00 A.M.*
Amsterdam	5:20 P.M.	Le Havre	5:00 P.M.	Mexico City	11:00 A.M.
Athens	7:00 P.M.	Hong Kong	1:00 A.M.*	Natal Province	7:00 P.M.
Berlin	6:00 P.M.	Honolulu	6:30 A.M.	Paris	5:00 P.M.
Berne	6:00 P.M.	Istanbul	7:00 P.M.	Rio de Janeiro	2:00 P.M.
Bogota	12:00 NOON	Leningrad	7:00 P.M.	Rome	6:00 P.M.
Bombay	10:30 P.M.	Lima	12:00 NOON	Santiago (Chile)	1:00 P.M.
Bremen	6:00 P.M.	Lisbon	5:00 P.M.	Sitka, Alaska	7:00 A.M.
Brussels	5:00 P.M.	Liverpool	5:00 P.M.	Stockholm	6:00 P.M.
Copenhagen	6:00 P.M.	London	5:00 P.M.	Tokyo	2:00 A.M.*
Dublin	5:00 P.M.	Madrid	5:00 P.M.	Vienna	6:00 P.M.

Twelve o'clock Noon U. S. E. S. T. Compared with Clocks in the Following Cities:

Atlanta	12:00 NOON	El Paso	11:00 A.M.	Norfolk	12:00 NOON
Atlantic City	12:00 NOON	Galveston	11:00 A.M.	Omaha	11:00 A.M.
Baltimore	12:00 NOON	Indianapolis	11:00 A.M.	Philadelphia	12:00 NOON
Birmingham	11:00 A.M.	Kansas City	11:00 A.M.	Pittsburgh	12:00 NOON
Boston	12:00 NOON	Los Angeles	9:00 A.M.	Richmond, Va.	12:00 NOON
Buffalo	12:00 NOON	Louisville	11:00 A.M.	Salt Lake City	10:00 A.M.
Charleston	12:00 NOON	Memphis	11:00 A.M.	San Francisco	9:00 A.M.
Chicago	11:00 A.M.	Milwaukee	11:00 A.M.	Savannah	12:00 NOON
Cleveland	12:00 NOON	Minneapolis	11:00 A.M.	Seattle	9:00 A.M.
Dallas	11:00 A.M.	Nashville	11:00 A.M.	St. Louis	11:00 A.M.
Denver	10:00 A.M.	New Orleans	11:00 A.M.	Topeka	11:00 A.M.
Detroit	12:00 NOON	New York	12:00 NOON	Washington	12:00 NOON

*Time noted is in the morning of the following day.



Perpetual Calendar
1800—2000 A. D.

Day of the month	Jan. Oct.	Apr. Jul. Jan.	Sept. Dec.	Jun.	Feb. Mar. Nov.	Aug. Feb.	May	
1 8 15 22 29.....	A	B	C	D	E	F	G	Mon.
2 9 16 23 30.....	G	A	B	C	D	E	F	Tue.
3 10 17 24 31.....	F	G	A	B	C	D	E	Wed.
4 11 18 25.....	E	F	G	A	B	C	D	Thu.
5 12 19 26.....	D	E	F	G	A	B	C	Fri.
6 13 20 27.....	C	D	E	F	G	A	B	Sat.
7 14 21 28.....	B	C	D	E	F	G	A	Sun.
	<i>1804</i>	<i>1805</i>	<i>1800</i>	<i>1801</i>	<i>1802</i>	<i>1803</i>	<i>1809</i>	
	<i>1810</i>	<i>1811</i>	<i>1806</i>	<i>1807</i>	<i>1813</i>	<i>1808</i>	<i>1815</i>	
	<i>1821</i>	<i>1816</i>	<i>1817</i>	<i>1812</i>	<i>1819</i>	<i>1814</i>	<i>1820</i>	
	<i>1827</i>	<i>1822</i>	<i>1823</i>	<i>1818</i>	<i>1824</i>	<i>1825</i>	<i>1826</i>	
	<i>1832</i>	<i>1833</i>	<i>1828</i>	<i>1829</i>	<i>1830</i>	<i>1831</i>	<i>1837</i>	
	<i>1838</i>	<i>1839</i>	<i>1834</i>	<i>1835</i>	<i>1841</i>	<i>1836</i>	<i>1843</i>	
	<i>1849</i>	<i>1844</i>	<i>1845</i>	<i>1840</i>	<i>1847</i>	<i>1842</i>	<i>1848</i>	
	<i>1855</i>	<i>1850</i>	<i>1851</i>	<i>1846</i>	<i>1852</i>	<i>1853</i>	<i>1854</i>	
To find, for example, the day of the week for Dec. 1, 1891.	<i>1860</i>	<i>1861</i>	<i>1856</i>	<i>1857</i>	<i>1858</i>	<i>1859</i>	<i>1865</i>	
	<i>1866</i>	<i>1867</i>	<i>1862</i>	<i>1863</i>	<i>1869</i>	<i>1864</i>	<i>1871</i>	
	<i>1877</i>	<i>1872</i>	<i>1873</i>	<i>1868</i>	<i>1875</i>	<i>1870</i>	<i>1876</i>	
Under Dec., opposite 1, is the letter C. In the 1891 column, opposite C, is Tue. Hence Dec. 1, 1891 was a Tuesday.	<i>1883</i>	<i>1878</i>	<i>1879</i>	<i>1874</i>	<i>1880</i>	<i>1881</i>	<i>1882</i>	
	<i>1888</i>	<i>1889</i>	<i>1884</i>	<i>1885</i>	<i>1886</i>	<i>1887</i>	<i>1893</i>	
	<i>1894</i>	<i>1895</i>	<i>1890</i>	<i>1891</i>	<i>1897</i>	<i>1892</i>	<i>1899</i>	
	<i>1900</i>	<i>1901</i>	<i>1902</i>	<i>1896</i>	<i>1909</i>	<i>1898</i>	<i>1905</i>	
Note: In leap-years, use the Jan. and Feb. in italics, but do not use these for common years.	<i>1906</i>	<i>1907</i>	<i>1913</i>	<i>1903</i>	<i>1915</i>	<i>1904</i>	<i>1911</i>	
	<i>1917</i>	<i>1912</i>	<i>1919</i>	<i>1908</i>	<i>1920</i>	<i>1910</i>	<i>1916</i>	
	<i>1923</i>	<i>1918</i>	<i>1924</i>	<i>1914</i>	<i>1926</i>	<i>1921</i>	<i>1922</i>	
The table has other uses, as finding in what year certain months began on certain days of the week.	<i>1928</i>	<i>1929</i>	<i>1930</i>	<i>1925</i>	<i>1937</i>	<i>1927</i>	<i>1933</i>	
	<i>1934</i>	<i>1935</i>	<i>1941</i>	<i>1931</i>	<i>1943</i>	<i>1932</i>	<i>1939</i>	
	<i>1945</i>	<i>1940</i>	<i>1947</i>	<i>1936</i>	<i>1948</i>	<i>1938</i>	<i>1944</i>	
	<i>1951</i>	<i>1946</i>	<i>1952</i>	<i>1942</i>	<i>1954</i>	<i>1949</i>	<i>1950</i>	
	<i>1956</i>	<i>1957</i>	<i>1958</i>	<i>1953</i>	<i>1965</i>	<i>1955</i>	<i>1961</i>	
	<i>1962</i>	<i>1963</i>	<i>1969</i>	<i>1959</i>	<i>1971</i>	<i>1960</i>	<i>1967</i>	
	<i>1973</i>	<i>1968</i>	<i>1975</i>	<i>1964</i>	<i>1976</i>	<i>1966</i>	<i>1972</i>	
	<i>1979</i>	<i>1974</i>	<i>1980</i>	<i>1970</i>	<i>1982</i>	<i>1977</i>	<i>1978</i>	
	<i>1984</i>	<i>1985</i>	<i>1986</i>	<i>1981</i>	<i>1993</i>	<i>1983</i>	<i>1989</i>	
	<i>1990</i>	<i>1991</i>	<i>1997</i>	<i>1987</i>	<i>1999</i>	<i>1988</i>	<i>1995</i>	
		<i>1996</i>		<i>1992</i>		<i>1994</i>	<i>2000</i>	
				<i>1998</i>				

WORLD CALENDAR

Exposition

The perpetual World Calendar divides the year into equal quarters of 91 days, or thirteen weeks, or three months, or approximately one season. The first month in each quarter contains 31 days. The other two months have 30 days each, every month having twenty-six weekdays plus Sundays. Every quarter with its monthly arrangement of 31-30-30 days begins on a Sunday, the first day of the week, and ends on a Saturday, the seventh day of the

week, which is easy for business, accountants and educators because the closing day of every quarter does not fall on a Sunday. Every year begins logically on the accepted first day of the week, a Sunday, January 1. This plan retains the customary arrangement of weekdays.

The 364-day year is not complete however. The 365th day of the year, essential in keeping the calendar in step with the seasons, is the logical Year-End World

Holiday, dated W or December 31, that follows Saturday, December 30, every year. By giving the 365th day, the Year-End World Holiday, a name and date, a blank date is avoided. This World Holiday is an integral part of the year; it belongs to and completes the calendar.

The extra day in leap years is the Leap-Year World Holiday, dated W or June 31, and follows Saturday, June 30. By placing these two stabilizing days, the Leap-Year World Holiday in leap years at the end of

the second quarter and the Year-End World Holiday every year at the end of the fourth quarter, the calendar in leap years becomes balanced, each half-year having 183 days. The calendar is thus a stable, balanced, well-coordinated time system, comparable from year to year.

Fourteen nations have already approved the World Calendar, including Brazil, Chile, China, Norway, Greece, Peru, Spain, Turkey and Uruguay.

The World Calendar

FIRST QUARTER																				
JANUARY							FEBRUARY							MARCH						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
1	2	3	4	5	6	7				1	2	3	4						1	2
8	9	10	11	12	13	14	5	6	7	8	9	10	11	3	4	5	6	7	8	9
15	16	17	18	19	20	21	12	13	14	15	16	17	18	10	11	12	13	14	15	16
22	23	24	25	26	27	28	19	20	21	22	23	24	25	17	18	19	20	21	22	23
29	30	31					26	27	28	29	30			24	25	26	27	28	29	30

SECOND QUARTER																				
APRIL							MAY							JUNE						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
1	2	3	4	5	6	7				1	2	3	4						1	2
8	9	10	11	12	13	14	5	6	7	8	9	10	11	3	4	5	6	7	8	9
15	16	17	18	19	20	21	12	13	14	15	16	17	18	10	11	12	13	14	15	16
22	23	24	25	26	27	28	19	20	21	22	23	24	25	17	18	19	20	21	22	23
29	30	31					26	27	28	29	30			24	25	26	27	28	29	30
																				*W

THIRD QUARTER																				
JULY							AUGUST							SEPTEMBER						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
1	2	3	4	5	6	7				1	2	3	4						1	2
8	9	10	11	12	13	14	5	6	7	8	9	10	11	3	4	5	6	7	8	9
15	16	17	18	19	20	21	12	13	14	15	16	17	18	10	11	12	13	14	15	16
22	23	24	25	26	27	28	19	20	21	22	23	24	25	17	18	19	20	21	22	23
29	30	31					26	27	28	29	30			24	25	26	27	28	29	30

FOURTH QUARTER																				
OCTOBER							NOVEMBER							DECEMBER						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
1	2	3	4	5	6	7				1	2	3	4						1	2
8	9	10	11	12	13	14	5	6	7	8	9	10	11	3	4	5	6	7	8	9
15	16	17	18	19	20	21	12	13	14	15	16	17	18	10	11	12	13	14	15	16
22	23	24	25	26	27	28	19	20	21	22	23	24	25	17	18	19	20	21	22	23
29	30	31					26	27	28	29	30			24	25	26	27	28	29	30
																				+W

*The Year-End World Holiday, W or December 31 (365th day), follows December 30 every year.
†The Leap-Year World Holiday, W or June 31 (an extra day), follows June 30 in leap years only.

The Seasons, 1947

(Eastern Standard Time)

	d	h	m	
Mar. 21	6	13	A.M.	Sun enters sign of Aries; spring begins in northern hemisphere.
Jun. 22	1	19	A.M.	Sun enters sign of Cancer; summer begins in northern hemisphere.
Sept. 23	4	29	P.M.	Sun enters sign of Libra; autumn begins in northern hemisphere.
Dec. 22	11	43	A.M.	Sun enters sign of Capricornus; winter begins in northern hemisphere.

Astronomical Constants

1 light-year	5,880,000,000,000 mi.
velocity of light	186,273 mi/sec
astronomical unit or distance earth-to-sun	93,003,000 mi.
mean distance, earth to moon	238,860 mi.
general precession	50" .26
obliquity of the ecliptic	23° 27' 8".26—0".4684(t—1900)*
equatorial radius of the earth	3963.34 statute mi.
polar radius of the earth	3949.99 statute mi.
earth's mean radius	3958.89 statute mi.
oblateness of the earth	$\frac{1}{297.0}$
equatorial horizontal parallax of the moon	57' 2".70
sun's diameter	865,380 mi.
sidereal year	365 ^d .2564
tropical year	365 ^d .2422
sidereal month	27 ^d .3217
synodic month	29 ^d .5306
sidereal day	23 ^h 56 ^m 4 ^s .091 of mean-solar time
mean-solar day	24 ^h 3 ^m 56 ^s .555 of sidereal time

*t refers to the year in question, for example 1946.

Planet Table

	Mean distance from sun, in millions of miles	Period of revolution around the sun	Eccentricity of orbit	Inclination to ecliptic	Diameter	Period of rotation on axis	Inclination of equator to orbit plane	Surface gravity (earth = 1)	Oblateness	Mean velocity in orbit	Known moons
				° /	miles		°			mi./sec.	
Sun.....					865,380	25 ^d .38	7.2	28.0	0		
Moon.....		27 ^d .322	0.06	5 9	2,159.9	27 ^d .322	6½	0.16	0	0.63	
Mercury....	36.0	87 ^d .969	0.21	7 0	3,008.5	88 ^d .	7	0.26	0	30	0
Venus.....	67.2	224 ^d .701	0.01	3 24	7,575.4		?	0.90	0	22	0
Earth.....	92.9	365 ^d .256	0.02	0 0	7,926.7	23 ^h 56 ^m	23½	1.00	1/297	18½	1
Mars.....	141.5	1 ^y .881	0.09	1 51	4,215.6	24 ^h 37 ^m	24	0.38	1/192	15	2
Jupiter....	483.3	11 ^y .862	0.05	1 18	88,698	9 ^h 50 ^m	3	2.40	1/15	8	11
Saturn.....	886.1	29 ^y .458	0.06	2 29	75,060	10 ^h 14 ^m	26¼	0.95	1/9.5	6	9
Uranus.....	1783	84 ^y .015	0.05	0 46	30,878	10 ^h .8	98	0.96	1/14	4	4
Neptune....	2793	164 ^y .788	0.01	1 46	32,932	15 ^h .8	29	1.00	1/40	3	1
Pluto.....	3666	247 ^y .697	0.25	17 9	5900	??	??	??	??	1½	0

NOTE: The rotation of Venus is uncertain, but is probably a few weeks or months. The equatorial diameters of the earth, Jupiter, and Saturn are given; the polar diameter of the earth is 7900.0 mi., of Jupiter 82,789 mi., and of Saturn 67,170 mi. The above table was taken from *New Handbook of the Heavens*, 2d ed. (McGraw-Hill Book Co.).

One of the most beautiful spectacles for telescopic observation is Saturn when the planet is in such a position that its rings present their broadest aspect, at which time the planet is three times as bright as when the rings are presented edgewise.

In fact, when the rings are edgewise they are not visible through small telescopes. The rings are composed of millions of particles in a flattened circular band about 41,500 miles from inner to outer edge and not more than 10 miles in thickness.

Symbols

Planets, etc.

☉ the sun	♄ Saturn
☾ the moon	♅ Uranus
☿ Mercury	♆ Neptune
♀ Venus	♇ Pluto
♁ the earth	♁ conjunction
♂ Mars	☾ occultation
♃ Jupiter	

Signs of the Zodiac

(1) ♈ Aries, the Ram	(7) ♎ Libra, the Balance
(2) ♉ Taurus, the Bull	(8) ♏ Scorpius, the Scorpion
(3) ♊ Gemini, the Twins	(9) ♐ Sagittarius, the Archer
(4) ♋ Cancer, the Crab	(10) ♑ Capricornus, the Goat
(5) ♌ Leo, the Lion	(11) ♒ Aquarius, the Water-bearer
(6) ♍ Virgo, the Virgin	(12) ♓ Pisces, the Fishes

Phenomena, 1947 (Eastern Standard Time)

January				July			
d	h	m		d	h	m	
13	9	—	p.m. Earth in perihelion	2	3	—	p.m. ☿ ♀ ♄, ♀ 34' south
12	10	7	p.m. Moon on celestial equator	5	5	—	a.m. Earth in aphelion
16	8	25	a.m. ☿ ♃ ♄, ♃ 38' south	14	10	23	p.m. ☿ ♃ ♄ Aldebaran, ♂ 5°22' north
18	6	30	a.m. Jupiter's moons on w. side	14	11	56	p.m. ☿ ♃ ♄, ♂ 56' south
27	10	—	p.m. ♀, greatest elong. w., 46°56'	23	—	—	♃ on merid., 7 p.m., L.C.T.
29	—	—	♂ on merid., 0 ^h a.m., L.C.T.	26	1	41	a.m. ☿ ♃ ♄ ♄, ♄ 13' south
February				August			
1	1	2	p.m. ☿ ♄ ♄, ♄ 39' south	3	3	—	p.m. ♄, greatest elong. w., 19°21'
2-3	—	—	♂ ♄ Geminorum, mag. 3.2, 2 ^d 11:43 pm to 3 ^d 0:45 am EST for Wash., D. C.	5	9	—	p.m. ☿ ♃ ♄, ♂ 1' north
12	10	44	p.m. ☿ ♃ ♄ ♄, ♄ 1' south	6	28	6	p.m. ♄ on celestial equator
15	—	—	♃ on merid., 6 a.m., L.C.T.	12	7	3	p.m. ♄, max. dec., +26°22'10''
20	10	—	p.m. ♄, greatest elong. e., 18°7'	18	5	—	a.m. ♄, max. dec. n., +23°42'52''
25	—	—	♂ on merid., 10 p.m., L.C.T.	22	12	47	p.m. ☿ ♃ ♄ ♄, ♄ 7' north
March				September			
3	9	15	p.m. ☿ ♄ ♄, ♄ 3°35' south	8	6	25	p.m. ☿ ♄ ♄ ♄, ♄ 2°24' south
12	9	56	a.m. ☿ ♃ ♄ ♄, ♄ 27' north	10	5	58	a.m. ☿ ♃ ♄ ♄, ♂ 3°19' south
14	—	—	♂ ♄ Ophiuchi, mag. 3.4, 3:43 to 4:36 a.m., P.S.T. for Cal.	15	5	38	p.m. ☿ ♃ ♄ Castor, ♂ 9°28' south
15	10	23	p.m. ♄ at max. dec., -25°56'24''	15	7	45	p.m. ♄ on celestial equator
18	—	—	♃ on merid., 4 a.m., L.C.T.	19	9	57	p.m. ☿ ♃ ♄ Pollux, ♂ 5°58' south
23	2	34	a.m. ♄ on celestial equator	22	8	50	p.m. ♄ at max. dec., -26°40'44''
April				October			
5	0	45	a.m. ♄ on celestial equator	6	8	44	p.m. ☿ ♃ ♄ Spica, ♀ 3°17' north
5	6	—	a.m. ♄, greatest elong. w., 27°48'	8	3	36	p.m. ☿ ♃ ♄ ♄, ♂ 3°49' south
12	—	—	♂ ♄ Sagittarii, mag. 3.3, 4:38 to 6:10 a.m., C.S.T. for Illinois	10	—	—	♂ ♄ Leonis, mag. 3.6, 5:34 to 6:43 a.m., E.S.T. for Wash., D. C.
16	—	—	♃ on merid., 2 a.m., L.C.T.	13	6	—	p.m. ♄, greatest elong. e., 25°2'
19	2	30	a.m. ♄'s sat. all on east side	20	3	56	a.m. ♄, max. dec., -26°51'38''
27	—	—	♂ on merid., 6 p.m., L.C.T.	29	5	—	a.m. ☿ ♄ ♄ ♄, ♄ 2°42' south
May				November			
5	7	9	p.m. ☿ ♃ ♄ ♄, ♄ 24' north	9	9	—	a.m. ☿ ♃ ♄ ♄, ♄ 56' south
16	9	34	p.m. ♄ on celestial equator	11	1	—	p.m. ☿ ♃ ♄ ♄, ♂ 55' north
17	7	—	a.m. ☿ ♃ ♄ ♄, ♄ 1°1' south	13	2	56	a.m. ☿ ♃ ♄ Antares, ♂ 4°9' north
18	4	30	a.m. ☿ ♃ ♄ ♄, ♄ 1°25' north	14	5	25	a.m. ☿ ♃ ♄ ♄, ♄ 1°0' north
20	0	45	a.m. ♄'s moons all on w. side	16	1	15	p.m. ♄, max. dec., -26°54'52''
26	—	—	♃ on merid., 11 p.m., L.C.T.	22	6	—	a.m. ♄, greatest elong. w., 19°44'
June				December			
1	7	5	p.m. ☿ ♃ ♄ ♄, ♄ 1' north	3	8	36	a.m. ☿ ♄ ♄ ♄, ♄ 4°28' south
16	3	26	a.m. ☿ ♃ ♄ ♄, ♂ 44' north	6	6	30	p.m. ♄ on celestial equator
17	6	—	a.m. ♄, greatest elong. east, 24°41'	14	2	34	p.m. ☿ ♃ ♄ ♄, ♄ 2°42' north
21	5	3	p.m. ☿ ♄ Aldebaran, ♀ 4°38' north	17	—	—	♂ on merid., 4 a.m., L.C.T.
23	—	—	♃ on merid., 9 p.m., L.C.T.	31	—	—	♂ ♄ Leonis, mag. 3.6, 0:39 to 1:53 a.m., E.S.T. for Wash., D. C.
28	8	11	p.m. ☿ ♃ ♄ ♄, ♄ 15' south	31	5	34	p.m. ☿ ♃ ♄ ♄, ♂ 1°47' south

Eclipses in 1947

(1) *Total eclipse of the sun, May 20.* This is visible in South America and Africa. The path of totality begins in the Pacific Ocean, approximately 300 miles west of Concepción, Chile; it travels across Chile, Argentina, Paraguay, and part of Brazil. The path then crosses the Atlantic and enters Africa at Liberia; it goes eastward along the coast and crosses French Equatorial Africa and Belgian Congo; it ends near Nairobi, Kenya. The longest duration of totality (5m 14s) takes place in the Atlantic, while at Santiago, Chile, totality lasts 2m 23s, and at Bahia [São Salvador], Brazil, 4m 16s. The sun is in partial eclipse from all stations in South America south of a line from Guayaquil, Ecuador, to the mouth of the Orinoco River.

The path of totality, about 100 miles in width, enters the coast of South America at Pichilemu, Chile, and the center-line of the shadow passes over or close to the following stations: Santiago, Chile (at 8:10 A.M., 60th-meridian time), Mendoza, Tostado, and Corrientes, Argentina; Villarica and Armisticio, Paraguay; Santa Helena, Brazil (at 9:20 A.M., 45th-meridian time), Agua Boa, Ibiá, Chapada de Conquista, Santarem, and Bahia, Brazil (the time at Bahia being 9:49 A.M., 45th-meridian time).

(2) *Partial eclipse of the moon, June 3.* This is invisible in North America. In general, the eclipse is visible in the South Atlantic, Europe, Africa, Asia, the Indian

Ocean, Australia, Antarctica, and the western Pacific Ocean. The eclipse is a small one, only about 0.02 of the moon being covered by the shadow of the earth. Mid-eclipse occurs at 11:15 P.M., 60th-meridian-east standard time (2:15 P.M., E.S.T.).

(3) *Annular eclipse of the sun, November 12.* In the annular phase, this is visible in northern South America, and in the partial phase, in the western and south-western parts of North America and the greater part of the northern half of South America. The path of the annular eclipse begins in the Pacific, south of the Aleutian Islands, and goes southeastward and eastward, entering the coast of Peru at Lobitos at 4:40 P.M., 75th-meridian time. It ends in Brazil at a point approximately 670 miles N.W. of Manaus. The maximum duration of the annular phase (4m 3s) occurs in the Pacific, west of the Galápagos Islands. At Lobitos, the duration is 3m 40s.

The northern and western parts of South America are under the partial phases, as far south as a line from Concepción, Chile, to Porto Alegre, Brazil, and as far east as a line from Belém to Porto Alegre. The middle of the partial phases in the United States occurs at the following stations at the indicated times, and with the tabulated magnitudes of eclipse—the magnitude being the proportion of the solar disc eclipsed:

Station	Time	Mag.	Station	Time	Mag.
Portland, Ore.	11:03 a.m., P.S.T.	0.28	Phoenix, Ariz.	12:30 p.m., M.S.T.	0.31
Berkeley, Cal.	11:05 a.m., P.S.T.	0.39	Denver, Col.	12:42 p.m., M.S.T.	0.14
Sacramento, Cal.	11:06 a.m., P.S.T.	0.37	St. Louis, Mo.	2:22 p.m., C.S.T.	0.05
Carson City, Nev.	11:09 a.m., P.S.T.	0.33	Little Rock, Ark.	2:24 p.m., C.S.T.	0.11
Boise, Idaho.	12:14 p.m., M.S.T.	0.22	Atlanta, Ga.	3:43 p.m., E.S.T.	0.10
Salt Lake City, Utah.	12:25 p.m., M.S.T.	0.21	New York, N. Y.	3:48 p.m., E.S.T.	0.02

The Brightest Stars

Star	Constellation	Position, 1950			Mag.	Dist.	On meridian 9 p. m.
		R.A.	Dec.				
		h	m	°		l. y.	
Sirius.	Canis Major.	6 42.9	-16 39	-1.6		8	Feb. 16
Canopus.	Carina.	6 22.8	-52 40	-0.9		650	Feb. 11
Alpha Centauri.	Centaurus.	14 36.2	-60 38	+0.1		4	Jun. 16
Vega.	Lyra.	18 35.2	+38 44	0.1		23	Aug. 15
Capella.	Auriga.	5 13.0	+45 57	0.2		42	Jan. 24
Arcturus.	Bootes.	14 13.4	+19 27	0.2		32	Jun. 10
Rigel.	Orion.	5 12.1	-8 15	0.3		545	Jan. 24
Procyon.	Canis Minor.	7 36.7	+5 21	0.5		10	Mar. 2
Achernar.	Eridanus.	1 35.9	-57 29	0.6		70	Nov. 30
Beta Centauri.	Centaurus.	14 0.3	-60 8	0.9		130	Jun. 7
Altair.	Aquila.	19 48.3	+8 44	0.9		18	Sept. 3
Betelgeuse.	Orion.	5 52.5	+7 24	0.9		300	Feb. 3
Aldebaran.	Taurus.	4 33.0	+16 25	1.1		54	Jan. 14

Star	Constellation	Position, 1950 R.A. Dec.	Mag.	Dist.	On meridian 9 p. m.
Spica.....	Virgo.....	13 22.6 -10 54	1.2	190	May 28
Pollux.....	Gemini.....	7 42.3 +28 9	1.2	31	Mar. 3
Antares.....	Scorpius.....	16 26.3 -26 19	1.2	170	Jul. 14
Fomalhaut.....	Piscis Austrinus.....	22 54.9 -29 53	1.3	27	Oct. 20
Deneb.....	Cygnus.....	20 39.7 +45 6	1.3	465	Sept. 16
Regulus.....	Leo.....	10 5.7 +12 13	1.3	70	Apr. 9
Beta Crucis.....	Crux.....	12 44.8 -59 25	1.5	465	May 18
Eta Carinae.....	Carina.....	10 43.1 -59 25	1-7	...	Apr. 17
Alpha-one Crucis.....	Crux.....	12 23.8 -62 49	1.6	150	May 13
Castor.....	Gemini.....	7 31.4 +32 0	1.6	44	Feb. 28
Gamma Crucis.....	Crux.....	12 28.4 -56 50	1.6	...	May 15
Epsilon Canis Majoris.....	Canis Major.....	6 56.7 -28 54	1.6	325	Feb. 19
Epsilon Ursae Majoris.....	Ursa Major.....	12 51.8 +56 14	1.7	50	May 20
Bellatrix.....	Orion.....	5 22.4 + 6 18	1.7	215	Jan. 27
Lambda Scorpii.....	Scorpius.....	17 30.2 -37 4	1.7	205	Jul. 30
Epsilon Carinae.....	Carina.....	8 21.5 -59 21	1.7	325	Mar. 13
Mira.....	Cetus.....	2 16.8 - 3 12	2-9	250	Dec. 11
Epsilon Orionis.....	Orion.....	5 33.7 - 1 14	1.7	405	Jan. 29
Beta Tauri.....	Taurus.....	5 23.1 +28 34	1.8	115	Jan. 27
Beta Carinae.....	Carina.....	9 12.7 -69 31	1.8	...	Mar. 26
Alpha Trianguli Australis.....	Triangulum Australe.....	16 43.4 -68 56	1.9	130	Jul. 18
Alpha Persei.....	Perseus.....	3 20.7 +49 41	1.9	190	Dec. 27
Eta Ursae Majoris.....	Ursa Major.....	13 45.6 +49 34	1.9	220	Jun. 3
Gamma Geminorum.....	Gemini.....	6 34.8 +16 27	1.9	65	Feb. 14
Epsilon Sagittarii.....	Sagittarius.....	18 20.9 -34 25	1.9	165	Aug. 12
Alpha Ursae Majoris.....	Ursa Major.....	11 0.7 +62 1	1.9	90	Apr. 22
Delta Canis Majoris.....	Canis Major.....	7 6.4 -26 19	2.0	410	Feb. 22

Twenty
Famous Comets

Year and no.	Name of comet	Period
		years
1744	De Cheseaux's Comet.....	.....
1806	Biela's Comet.....	6.7
1811 I	Great Comet of 1811.....	3000
1812	Di Vico's Comet.....	70.7
1815	Olbers' Comet.....	74.0
1819 I	Encke's Comet.....	3.3
1819	Pons-Winnecke Comet.....	6.0
1835 III	Halley's Comet.....	76.3
1843 I	Great Comet of 1843.....	.....
1844 II	Great Comet of 1844.....	102,050
1858 VI	Donati's Comet.....	2,040 (?)
1864 II	Great Comet of 1864.....	2,800,000
1871 III	Tuttle's Comet.....	13.8
1874 III	Coggia's Comet.....	6,000 (?)
1879	Brorsen's Comet.....	5.6
1881 II	Tebbutt's Comet.....	.....
1889 VI	Swift's 2nd Comet.....	7.0
1892 III	Holmes' Comet.....	6.9
1923	d'Arrest's Comet.....	6.6
1925 II	Comet Schwassmann-Wachmann.....	16.2

Notable Telescopes of the World
Refractor Telescopes

Size in inches	Observatory	Location
40	Yerkes	Williams Bay, Wis.
36	Lick	Mt. Hamilton, Calif.
32.7	Paris (Univ. of)	Meudon, France
31.5	Astrophysical	Potsdam, Germany
30	Allegheny	Pittsburgh, Pa.
30	Bischoffsheim	Nice, France
30	Poulkova	Leningrad, U. S. S. R.

Reflector Telescopes

200	Palomar (being set up)	Mt. Palomar, Calif.
100	Mt. Wilson	Pasadena, Calif.
82	McDonald	Mt. Locke, Texas
74	Dunlap	Richmond Hill, Ont.
72	Lord Ross (dismantled)	Parsonstown, Eire
72	Dominion Astrophysical	Victoria, B. C.
69	Perkins	Delaware, Ohio
61	Harvard	Oak Ridge, Mass.
60	Bloemfontein	Bloemfontein, So. Africa
60	Mt. Wilson	Pasadena, Calif.
60	Cordoba	Bosque Alegre, Argentina

A curious thing about comets is that that tails always trail from the head in a direction away from the Sun, so that when a comet is moving away from the Sun, the tail stretches out in front of the head. A comet's tail is so tenuous as to be almost

a vacuum. The Earth passed through the tail of Halley's Comet in May, 1910, and on that occasion astronomers heard nothing, felt nothing and saw nothing to indicate that such passage had any observable effect on the Earth.

1946

JANUARY							FEBRUARY							MARCH						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
—	—	①	2	3	4	5	—	—	—	—	—	1	2	—	—	—	—	—	1	2
6	7	8	9	10	11	12	3	4	5	6	7	8	9	3	4	5	6	7	8	9
13	14	15	16	17	18	19	10	11	⑤	13	14	15	16	10	11	12	13	14	15	16
20	21	22	23	24	25	26	17	18	19	20	21	22	23	17	18	19	20	21	22	23
27	28	29	30	31	—	—	24	25	26	27	28	—	—	24	25	26	27	28	29	30
—	—	—	—	—	—	—	—	—	—	—	—	—	—	31	—	—	—	—	—	—
APRIL							MAY							JUNE						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
—	1	2	3	4	5	6	—	—	—	1	2	3	4	—	—	—	—	—	—	1
7	8	9	10	11	12	13	5	6	7	8	9	10	11	2	3	4	5	6	7	8
14	15	16	17	18	⑩	20	12	13	14	15	16	17	18	9	10	11	12	13	14	15
21	22	23	24	25	26	27	19	20	21	22	23	24	25	16	17	18	19	20	21	22
28	29	30	—	—	—	—	26	27	28	29	③	31	—	23	24	25	26	27	28	29
—	—	—	—	—	—	—	—	—	—	—	—	—	—	30	—	—	—	—	—	—
JULY							AUGUST							SEPTEMBER						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
—	1	2	3	④	5	6	—	—	—	1	2	3	—	1	②	3	4	5	6	7
7	8	9	10	11	12	13	4	5	6	7	8	9	10	8	9	10	11	12	13	14
14	15	16	17	18	19	20	11	12	13	14	15	16	17	15	16	17	18	19	20	21
21	22	23	24	25	26	27	18	19	20	21	22	23	24	22	23	24	25	26	27	28
28	29	30	31	—	—	—	25	26	27	28	29	30	31	29	30	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
OCTOBER							NOVEMBER							DECEMBER						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
—	—	1	2	3	4	5	—	—	—	—	—	1	2	1	2	3	4	5	6	7
6	7	8	9	10	11	⑫	3	4	⑤	6	7	8	9	8	9	10	11	12	13	14
13	14	15	16	17	18	19	10	⑪	12	13	14	15	16	15	16	17	18	19	20	21
20	21	22	23	24	25	26	17	18	19	20	21	22	23	22	23	24	②	26	27	28
27	28	29	30	31	—	—	24	25	26	27	⑧	29	30	29	30	31	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Astronomical Data

The Sun

There are countless millions of far distant, superheated, self-luminous gaseous bodies called stars and each one is in itself a sun. Our Sun—the star around which our whole solar system revolves—is at a mean distance of 93,003,000 miles from the Earth, has a diameter of 865,400 miles, a surface temperature of about 11,000° F. and an interior temperature estimated at millions of degrees. It has a surface area approximately 12,000 times that of the Earth and in volume or bulk it is about 1,306,000 times the size of the Earth. It is, nevertheless, a star of only average size and temperature.

The Sun rotates on its axis and, by observation of Sun-spots (great whirling storms in the Sun's atmosphere) and Faculae (bright streaks or areas on the Sun's surface), astronomers have discovered that the rotational speed varies from approximately 26½ days at its equator to

approximately 34 days near its poles. The Sun is just one star of the great Milky Way Galaxy that is rotating on its galactic axis at a rate that gives the Sun a galactic traveling speed of 175 miles per second. Furthermore, the Sun is moving toward a point known as "the apex of the Sun's way" in the constellation Hercules at a speed of about 12 miles per second.

What we see when we look at the Sun is the glowing surface called the Photosphere. Extending above this surface is the Sun's atmosphere consisting of two layers, one extending outward for a few hundred miles from the Sun's surface and called the Reversing Layer for spectroscopic reasons, the other an outer layer extending several thousand miles and called the Chromosphere because of its reddish color due mostly to superheated hydrogen, helium and calcium. Solar "prominences" occasionally burst out from this layer and

1947

JANUARY							FEBRUARY							MARCH						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
—	—	—	①	2	3	4	—	—	—	—	—	—	1	—	—	—	—	—	—	1
5	6	7	8	9	10	11	2	3	4	5	6	7	8	2	3	4	5	6	7	8
12	13	14	15	16	17	18	9	10	11	⑫	13	14	15	9	10	11	12	13	14	15
19	20	21	22	23	24	25	16	17	18	19	20	21	⑮	16	17	18	19	20	21	22
26	27	28	29	30	31	—	23	24	25	26	27	28	—	23	24	25	26	27	28	29
—	—	—	—	—	—	—	—	—	—	—	—	—	—	30	31	—	—	—	—	—
APRIL							MAY							JUNE						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
—	—	—	1	2	3	④	—	—	—	—	1	2	3	1	2	3	4	5	6	7
6	7	8	9	10	11	12	4	5	6	7	8	9	10	8	9	10	11	12	13	14
13	14	15	16	17	18	19	11	12	13	14	15	16	17	15	16	17	18	19	20	21
20	21	22	23	24	25	26	18	19	20	21	22	23	24	22	23	24	25	26	27	28
27	28	29	30	—	—	—	25	26	27	28	29	⑮	31	29	30	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
JULY							AUGUST							SEPTEMBER						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
—	—	—	1	2	3	④	—	—	—	—	—	1	2	—	⑤	2	3	4	5	6
6	7	8	9	10	11	12	3	4	5	⑥	7	8	9	7	8	9	10	11	12	13
13	14	15	16	17	18	19	10	11	12	13	14	15	16	14	15	16	17	18	19	20
20	21	22	23	24	25	26	17	18	19	20	21	22	23	21	22	23	24	25	26	27
27	28	29	30	31	—	—	24	25	26	27	28	29	30	28	29	30	—	—	—	—
—	—	—	—	—	—	—	31	—	—	—	—	—	—	—	—	—	—	—	—	—
OCTOBER							NOVEMBER							DECEMBER						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
—	—	—	1	2	3	4	—	—	—	—	—	—	1	—	1	2	3	4	5	6
5	6	7	8	⑩	10	11	2	3	④	5	6	7	8	7	8	9	10	11	12	13
12	13	14	15	16	17	18	9	10	⑪	12	13	14	15	14	15	16	17	18	19	20
19	20	21	22	23	24	25	16	17	18	19	20	21	22	21	22	23	24	⑮	26	27
26	27	28	29	30	31	—	23	24	25	26	⑯	28	29	28	29	30	31	—	—	—
—	—	—	—	—	—	—	30	—	—	—	—	—	—	—	—	—	—	—	—	—

extend hundreds of thousands of miles above the Sun's surface. Beyond these layers of solar atmosphere and extending to great height is the outermost observable solar feature, the magnificent Corona of exceedingly slight density that provides an awesome spectacle for observers during total eclipses of the Sun.

Comets

In ancient times comets were supposed to be omens of sudden death, war, revolution or other dire events in human affairs and practically nothing was known of their true nature. They still offer puzzling problems to modern astronomers and, with about 1000 listed, new ones are being discovered and charted each year. In general, comets consist of a nucleus (sometimes lacking) surrounded by a head or "coma" (from the Greek word for hair because of its hazy appearance) from which extends the great tail that makes the passage of a comet through our skies such a striking spectacle. Comets come in varying sizes but the average diameter of the heads of

a large number of observed comets is about 80,000 miles and the tail length may stretch out to more than 100,000,000 miles. The density of comets is so low, however, that we can see the stars through them and there is more actual material in one cubic inch of ordinary air than in 2000 cubic miles of the tail of a comet.

The luminous tails of comets were believed, for many centuries, to be merely clouds high in our atmosphere. Tycho Brahe, eccentric Danish astronomer, proved that the comet he observed in 1577 was a celestial object far beyond the limit of the Earth's atmosphere. But the great forward step in the study of comets came when Edmund Halley, who became England's Astronomer Royal, carefully observed a comet in 1682, checked with previous observations, calculated its orbit and predicted its return to our skies in 1758 or 1759. Halley died in 1742 but the comet, now named after him, reappeared on schedule and a search through ancient records indicated that it had been observed in repeated appearances as far back as 240

1948

JANUARY							FEBRUARY							MARCH						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
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4	5	6	7	8	9	10	8	9	10	11	⑫	13	14	7	8	9	10	11	12	13
11	12	13	14	15	16	17	15	16	17	18	19	20	21	14	15	16	17	18	19	20
18	19	20	21	22	23	24	⑫	⑬	24	25	26	27	28	21	22	23	24	25	⑭	27
25	26	27	28	29	30	31	29	—	—	—	—	—	—	28	29	30	31	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
APRIL							MAY							JUNE						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
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4	5	6	7	8	9	10	2	3	4	5	6	7	8	6	7	8	9	10	11	12
11	12	13	14	15	16	17	9	10	11	12	13	14	15	13	14	15	16	17	18	19
18	19	20	21	22	23	24	16	17	18	19	20	21	22	20	21	22	23	24	25	26
25	26	27	28	29	30	—	23	24	25	26	27	28	29	27	28	29	30	—	—	—
—	—	—	—	—	—	—	⑮	⑯	—	—	—	—	—	—	—	—	—	—	—	—
JULY							AUGUST							SEPTEMBER						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
—	—	—	—	1	2	3	1	2	3	4	5	6	7	—	—	—	1	2	3	4
④	⑤	6	7	8	9	10	8	9	10	11	12	13	14	5	⑥	7	8	9	10	11
11	12	13	14	15	16	17	15	16	17	18	19	20	21	12	13	14	15	16	17	18
18	19	20	21	22	23	24	22	23	24	25	26	27	28	19	20	21	22	23	24	25
25	26	27	28	29	30	31	29	30	31	—	—	—	—	26	27	28	29	30	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
OCTOBER							NOVEMBER							DECEMBER						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
—	—	—	—	—	1	2	—	1	③	3	4	5	6	—	—	—	1	2	3	4
3	4	5	6	7	8	9	7	8	9	10	⑪	12	13	5	6	7	8	9	10	11
10	11	⑫	13	14	15	16	14	15	16	17	18	19	20	12	13	14	15	16	17	18
17	18	19	20	21	22	23	21	22	23	24	⑮	26	27	19	20	21	22	23	24	⑯
24	25	26	27	28	29	30	28	29	30	—	—	—	—	26	27	28	29	30	31	—
31	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

B. C. Its last appearance was marked by its perihelion passage in 1910 and its next visit to our skies will occur in 1986. Halley's fulfilled prediction was the first definite proof that comets have regular orbits and time schedules or are, as the astronomers say, "periodic". The known "periods" (time intervals between appearances) of comets vary from the 3.3 years of Encke's Comet to thousands of years for wider travelers. No known bright comets are scheduled for appearance in our sky this year.

The Polar Auroras

It has been definitely established that Sun-spots are the direct cause of the greatest electrical show on Earth, a double feature, the Aurora Borealis (Northern Lights) and the Aurora Australis (Southern Lights). Sun-spots are magnetic storms of vast dimensions on the surface of the Sun and they shoot out electrified particles into space. Those that come toward the Earth are drawn toward the Earth's magnetic poles and consequently these magnetic poles are the radiating centers of

those spectacular electromagnetic displays in the sky that we commonly call the "Northern Lights" or the "Southern Lights", depending upon whether we see them in the northern or southern hemisphere. The electrical particles from the Sun-spots strike the upper regions of our atmosphere where the component gases (nitrogen, oxygen and extremely minor amounts of argon, helium, neon, hydrogen and carbon dioxide) are very much rarefied and cause them to vibrate and glow in colors characteristic of the various elements, just as a neon sign glows when an electric charge is passed through it. The Sun-spots that cause auroral displays also cause the magnetic storms that interfere with radio reception, telephone, telegraph and cable traffic and other electromagnetic devices such as compasses and various aviation accessories.

There is an almost infinite variety to the auroral display. The lights may sweep across the sky in waves, in streamers or in folds like draped curtains. Or it may be a stationary glow. Sometimes there is little

or no color in these waves, sheets or streamers of light. At other times the lights may be rich in red or green or pastel shades. Rose color and lavender and violet and purple are common. Blue is rare but has been seen. The "Northern Lights" have been seen as far south as New Orleans and the Florida peninsula and the "Southern Lights" have been seen as far north as New Zealand and Australia, but the maximum occurrence of these auroral displays is along the borders of the Arctic and Antarctic regions. Since these are atmospheric displays, our atmosphere must extend to the extreme height at which auroral lights are observed. Prof. Carl Störmer of the University of Oslo found this to be about 600 miles. He further found that no auroral lights came closer to the Earth's surface than 50 or 60 miles.

The International Date Line

A moment's thought will convince anyone that, since the Sun is always shining on our rotating Earth and thus what we call "daylight" is continuous, there must be some artificial means of separating one day from another for calendar purposes, some point or line at which, by international agreement, a different day begins, otherwise one day would last forever. The International Date Line is the place on the Earth's surface where days begin and end, or the place where, if we are traveling westward, Tuesday morning changes on the tick of midday into Wednesday afternoon. If the date line is crossed from West to East at the same moment, the reverse takes place and Wednesday morning, on the same tick of 12 m., changes to Tuesday afternoon. In one case the traveler may be said to "gain a day" and in the other case to "lose a day". One of Edgar Allan Poe's short stories, "Three Sundays In A Week", is based on this apparent paradox.

The International Date Line coincides, as nearly as practicable, with the 180th Meridian, which lies almost entirely on the waters of the Pacific Ocean. Deviations of the date line from the meridian are merely for the local convenience of inhabitants of island groups or land masses traversed by the meridian where one time belt is desirable for commercial transactions and domestic life.

The Change of Seasons

It is enough to state that the Earth is nearer to the Sun in January than it is in July to convince those who live in the northern hemisphere that there must be some other explanation than that for the seasonal changes on our globe. The reason for the change in seasons is that the axis of rotation of the Earth is tipped to the plane of its orbit around the Sun at an angle of approximately $23\frac{1}{2}$ degrees (more

accurately, it varies in 1947 from $23^{\circ} 26' 49''$ to $23^{\circ} 26' 52''$) and consequently there is a proportional shifting of the angle of the Sun's rays falling on different portions of the Earth's surface at different times in the year.

On or about June 21 the north end of the Earth's axis is tipped to its limit toward the Sun. In the northern hemisphere this is our Summer Solstice. We then have our longest days and receive a maximum of heat and light from the Sun whose perpendicular rays are falling on the Tropic of Cancer, $23\frac{1}{2}$ degrees north of the Equator. Six months later, on or about Dec. 21, the Earth has reached a position in its orbit that finds the north end of its axis tipped at its maximum away from the Sun. This is our Winter Solstice. We then have our shortest days and receive a minimum of heat and light from the Sun that is hovering over the Tropic of Capricorn, $23\frac{1}{2}$ degrees south of the Equator. Conditions are reversed in the southern hemisphere for obvious reasons. Their Winter is our Summer; their Summer our Winter. Twice a year, at the equinoxes in March and September, the Sun is on the Equator, the day is of equal length all over the world and each hemisphere receives the same amount of light and heat from the rays of the Sun.

If the effect in the change of the angle of the Sun's rays on the Earth's surface were instantaneous, our coldest period would be at the Winter Solstice and our warmest period at the Summer Solstice, but due to the blanket of atmosphere around the Earth and the cumulative effect in the heating or cooling of the Earth's surface, we have "the lag of the seasons" that brings our warmest and coldest periods some five or six weeks after the Sun is "farthest north" or "farthest south".

The Moon

The planet Mars has two tiny satellites or moons, Jupiter has eleven, Saturn nine, Uranus four and Neptune one. The Earth, like Neptune, has one satellite that is uniformly called The Moon. It is a globe of approximately 2160 miles in diameter with a surface deeply pitted by great craters. It has no atmosphere that astronomers can detect and shines only by reflected light of the Sun. Though it seems bright to us at "full moon", it reflects only about 7 percent of the light poured on it by the Sun.

The path of the Moon on its travels around the Earth is elliptical, with the Earth at one focus of the ellipse. The distance of the Moon from the Earth varies from 221,463 miles (perigee) to 252,710 miles (apogee), the average distance being 238,857 miles. The really curious thing about the Moon is that it revolves around

the Earth in 27 days, 7 hours, 43 minutes, 11.47 seconds and *rotates on its axis in exactly the same time*, which is why we always see the same side of the Moon. Due to what are known as "librations in latitude and longitude" and also a "diurnal libration", we do see "around the edge of the Moon" at different times and in this manner a total of 59 percent of the Moon's surface has been observed, but the other 41 percent never has been seen by human eye.

Although the Moon revolves around the Earth in approximately $27\frac{1}{4}$ days, it is, on the average, a matter of $29\frac{1}{2}$ days (29 days, 12 hours, 44 minutes, 2.78 seconds) from one New Moon to the other because the Earth is moving around the Sun while the Moon is moving around the Earth and the "New Moon" depends upon the relative positions of the three bodies. If the planes of orbit of the Earth and the Moon coincided, there would be an eclipse of the Moon at every "Full Moon" and an eclipse of the Sun at every "New Moon", but the (approximately) 5-degree angle between the planes of orbit of the Earth and the Moon causes the Moon on most of its revolutions to miss the Earth's shadow and the Moon's shadow on most trips to miss falling on the Earth. The tidal effects of the Moon are, of course, well known. The "Spring Tides" occur at "Full Moon" and "New Moon" and the "Neap Tides" at "First Quarter" and "Last Quarter".

The Atmosphere

The atmosphere of the Earth—the blanket of air that surrounds our globe and is essential to life—is of interest to astronomers because of its effect on the light that comes to us from heavenly bodies. Air has weight and volume. It refracts (bends or changes the direction of) light rays that enter it. Due to this refraction, we are able to see the Sun and the Moon before they rise and after they set. The "twinkling" of the stars is caused by convection currents in the air that have a rapidly changing refractive effect on the light from the stars. Our twilight is produced by the diffusion in the atmosphere of light from the Sun when it is below the horizon. Meteors become visible when they are heated to incandescence by friction with the atmosphere when, from outer space, they plunge into it at terrific speed.

Prof. Carl Störmer of the University of Oslo estimated the height of the atmosphere at a little more than 600 miles, but about half of it by weight is below 18,000 feet. Although we may remark blandly that something is "as light as air", the Earth's atmosphere in bulk is of such enormous weight that at sea level it exerts a pressure of approximately 14.7 pounds per square inch. At higher levels, of course, the pressure is less.

Chemically, the atmosphere is composed of nitrogen (approximately 78 percent by volume), oxygen (approximately 21 percent by volume), and extremely minor amounts (about 1 percent in all by volume) of argon, neon, helium, hydrogen and carbon dioxide. There is also present in the air a varying amount of water vapor, which is commonly complained of as "humidity" when the percentage is high in warm weather.

Meteors and Meteorites

Meteorites are meteors that have come down to Earth. Meteors are masses of mineral or metal or both that plunge into the Earth's atmosphere at great speed and become incandescent from the resultant friction so that they are seen in the sky as "fireballs" (bolides) or "shooting stars". The "fireballs" are the larger, make a greater flash across the sky and sometimes explode. Meteors come in all sizes but most of them verge on the microscopic and burn up completely in the flash that makes them visible from 40 to 60 miles above the Earth's surface. Millions of them enter our atmosphere every twenty-four hours and probably not more than one or two a day survive to strike the ground as meteorites.

The largest meteorite ever found is located near Grootfontein, Southwest Africa, and its weight is estimated between 50 and 70 tons. The second largest meteorite (the Ahnighito, weight $36\frac{1}{2}$ tons) was found by Admiral Peary, Arctic explorer, at Cape York, Greenland, and is now on exhibition in the Hayden Planetarium, New York City. The largest meteorite found on United States soil is the Willamette (weight $15\frac{1}{2}$ tons), which fell near Portland, Ore., and is now in the American Museum of Natural History, New York City.

Craters produced by the fall of meteorites have been found in many countries. The first to be recognized and the largest known is Meteor Crater in Arizona, a depression about 4,000 feet in diameter, about 600 feet deep, and with exterior walls rising 150 feet above the surrounding plain. Meteor craters have been found near Odessa, Texas; Haviland, Kansas; in the Arabian Desert; in Central Australia and—a notable group of fifty or more—in the region of the Stony Tunguska River in northern Siberia.

Many meteors travel in swarms, believed in some cases to be disintegrated comets. The Persid shower that occurs annually Aug. 10–12 is thought by some astronomers to be all that remains of Tuttle's Comet and the Leonid shower, which reaches a maximum in mid-November every 33 years, similarly is suspected of being what is left of Tempel's Comet. The Leonid shower of 1833 was the greatest meteor display of which astronomers have record.

Important Meteor Showers

Date	Meteor stream	Radiant in constellation
Jan. 1-4	Quadrantids	Bootes
Feb. 5-10	Alpha Aurigids	Auriga
Mar. 10-12	Zeta Bootids	Bootes
Apr. 19-23	Lyrids	Hercules
May 1-6	May Aquarids	Aquarius
May 30	Eta Pegasids	Pegasus
Jun. 27-30	Pons-Winnecke meteors	Draco
Jul. 14	Alpha Cygnids	Cygnus
Jul. 26-31	Delta Aquarids	Aquarius
Aug. 10-14	Perseids	Cassiopeia
Aug. 10-20	Kappa Cygnids	Cygnus
Aug. 21-31	Zeta Draconids	Draco
Sept. 22	Alpha Aurigids	Auriga
Oct. 2	Quadrantids	Bootes
Oct. 9	Giacobinids	Draco
Oct. 18-23	Orionids	Orion
Nov. 14-18	Leonids	Leo
Dec. 10-13	Geminids	Gemini

Projection Planetariums

Dr. Robert G. Aitken, Director Emeritus of the Lick Observatory, called the Zeiss Projector in planetarium use "the most remarkable instrument that has ever been devised to exhibit impressively, and with the illusion of reality, the motions of the heavenly bodies and the phenomena that result from these motions". The first of these projectors was invented and developed by Dr. Walter Bauersfeld at the Carl Zeiss plant at Jena, Germany, and the first planetarium in which it was put to use was in the Deutsches Museum in Munich, May, 1925. Between that time and the outbreak of World War II, twenty-seven other such Zeiss Projectors were constructed and shipped for use in planetariums spread around the world. Five planetariums for the use of the Zeiss Projector were erected in the United States. There were also Zeiss Projector planetariums in Vienna, The Hague, Brussels, Stockholm, Moscow, Paris, Milan, Rome, Tokyo and Osaka. Some smaller planetariums, with other projectors, have been built and are in operation in various places in the United States and Canada.

The Zeiss Projector planetariums in the United States are, in the order in which they were built:

Adler Planetarium, 900 E. Achsah Bond Drive, Chicago 5, Ill.
Director, Wagner Schlesinger.

Fels Planetarium, 20th St., Benjamin Franklin Parkway, Philadelphia 3, Pa.
Director, Roy K. Marshall.

Griffith Planetarium, P.O. Box 9866, Los Feliz Station, Los Angeles 27, Cal.
Director, Dinsmore Alter.

Hayden Planetarium, 81st St., Central Park West, New York 24, N. Y.
Director, Gordon A. Atwater.

Buhl Planetarium, Federal and West Ohio St., Pittsburgh 12, Pa.
Director, Arthur L. Draper.

Astronomical Photography

Since almost all astronomical research is now carried on by photographing the heavenly bodies, cameras and telescopes designed for this purpose are of the utmost importance. The old-fashioned astronomer who made great discoveries by long hours of peering through the eye-piece of his telescope has practically vanished from the great observatories. By photography records are secured that may be studied by other astronomers as well as by the one who made the photograph.

One of the improvements in this field, the Spectroheliograph, was developed about 1890 by two men working independently on the problem at a considerable distance from one another, George Ellery Hale in the United States and H. Deslandres in France. With this instrument the Sun's atmosphere, including the hydrogen prominences, may be photographed on any clear day. Before its invention, astronomers had to wait for a total eclipse of the Sun to make such studies. In 1924 Professor Hale improved the Spectroheliograph to the extent that it is possible to observe the Sun in the light of a single element and to see the prominences on any clear day.

Another advance in photographic instruments has been the designing and developing within the past ten years of the Coronagraph by Bernard Lyot of the Paris Observatory and the Pic du Midi Observatory. With this instrument the Sun's corona may be observed or photographed from high altitudes on any clear day. There is one Lyot Coronagraph installed at the Pic du Midi Observatory, another at Arosa, Switzerland, and another at Climax, Colorado, a station of the Harvard Observatory.

What many astronomers consider the greatest advance in the making of astronomical instruments in the last fifty years was the production of the Schmidt Camera. The details of construction and method of operation of this camera were made known in 1930 by Bernhard Schmidt of the Hamburg Observatory at Bergedorf, Germany. The Schmidt Camera takes photographs with large fields of vision and sharp definition at much greater speed than was possible with earlier apparatus. Schmidt Cameras as fast as $f/0.6$ have been made, and those with a speed of $f/1$ are common. These remarkable cameras have been installed at many observatories in various parts of the world.

Longitude, Latitude, Magnetic Declination of U. S. and Canadian Cities

The last column shows, in degrees, the magnetic declination, which is the angle that the magnetic meridian makes with the true, or geographic, meridian. When the value in degrees is marked w, the north end of the compass needle points west of true north by that number of degrees; when the value is e, the north end of the needle points east of true north by that many degrees.

City	Long.	Lat.	Dec.	City	Long.	Lat.	Dec.
	° /	° /	°		° /	° /	°
Eastport, Me.	67 0	44 54	21 w	Pierre, S. D.	97 33	44 22	12 e
Baagor, Me.	68 47	44 48	19 w	Sioux Falls, S. D.	96 44	43 33	11 e
Portland, Me.	70 15	43 40	17 w	Lincoln, Neb.	96 40	40 50	10 e
Manchester, N. H.	71 30	43 0	16 w	North Platte, Neb.	100 46	41 8	12 e
Montpelier, Vt.	72 32	44 15	16 w	Wichita, Kan.	97 17	37 43	10 e
Boston, Mass.	71 5	42 21	15 w	Garden City, Kan.	100 53	37 58	13 e
Springfield, Mass.	72 34	42 6	14 w	Oklahoma City, Okla.	97 28	35 26	10 e
Providence, R. I.	71 24	41 50	15 w	Amarillo, Tex.	101 50	35 11	12 e
New Haven, Conn.	72 55	41 19	12 w	Dallas, Tex.	96 46	32 46	9 e
New York, N. Y.	73 57½	40 48½	12 w	Sweetwater, Tex.	100 24	32 28	11 e
Albany, N. Y.	73 45	42 40	13 w	San Antonio, Tex.	98 33	29 23	10 e
Watertown, N. Y.	75 55	43 58	13 w	El Paso, Tex.	106 29	31 46	13 e
Syracuse, N. Y.	76 8	43 2	11 w	Havre, Mont.	109 43	48 33	20 e
Buffalo, N. Y.	78 50	42 55	7 w	Helena, Mont.	112 2	46 35	19 e
Scranton, Pa.	75 39	41 24	10 w	Lander, Wyo.	108 40	42 50	17 e
Philadelphia, Pa.	75 10	39 57	10 w	Cheyenne, Wyo.	104 52	41 9	15 e
Pittsburgh, Pa.	79 57	40 27	5 w	Denver, Col.	105 0	39 45	14 e
Atlantic City, N. J.	74 25	39 22	10 w	Grand Junction, Col.	108 33	39 5	15 e
Baltimore, Md.	76 38	39 18	8 w	Trinidad, Col.	104 30	37 10	14 e
Richmond, Va.	77 29	37 33	6 w	Santa Fe, N. M.	105 57	35 41	13 e
Roanoke, Va.	79 57	37 17	3 w	Carlsbad, N. M.	104 15	32 26	13 e
Charleston, W. Va.	81 38	38 21	2 w	Silver City, N. M.	108 18	32 46	14 e
Raleigh, N. C.	78 39	35 46	4 w	Idaho Falls, Idaho.	112 1	43 30	18 e
Charlotte, N. C.	80 50	35 14	2 w	Salmon, Idaho.	113 54	45 11	20 e
Wilmington, N. C.	77 57	34 14	3 w	Lewiston, Idaho.	117 2	46 24	21 e
Columbia, S. C.	81 2	34 0	1 w	Boise, Idaho.	116 13	43 36	19 e
Charleston, S. C.	79 56	32 47	2 w	Salt Lake City, Utah.	111 54	40 46	17 e
Atlanta, Ga.	84 23	33 45	2 e	Richfield, Utah.	112 5	38 46	17 e
Savannah, Ga.	81 5	32 5	0	Flagstaff, Ariz.	111 41	35 13	15 e
Jacksonville, Fla.	81 40	30 22	1 e	Phoenix, Ariz.	112 4	33 29	15 e
Tampa, Fla.	82 27	27 57	2 e	Nogales, Ariz.	110 56	31 21	14 e
Miami, Fla.	80 12	25 46	1 e	Las Vegas, Nev.	115 12	36 10	16 e
Key West, Fla.	81 48	24 33	3 e	Elko, Nev.	115 47	40 49	18 e
Sault Ste. Marie, Mich.	84 21	46 30	4 w	Austin, Nev.	117 4	39 29	18 e
Detroit, Mich.	83 3	42 20	3 w	Reno, Nev.	119 49	39 30	18 e
Grand Rapids, Mich.	85 40	42 58	1 e	Spokane, Wash.	117 26	47 40	23 e
Cleveland, Ohio.	81 37	41 28	5 w	Yakima, Wash.	120 33	46 34	22 e
Columbus, Ohio.	83 1	40 0	2 w	Seattle, Wash.	122 20	47 37	23 e
Cincinnati, Ohio.	84 30	39 8	1 e	Hoquiam, Wash.	123 54	46 59	23 e
Louisville, Ky.	85 46	38 15	1 e	Portland, Ore.	122 41	45 31	23 e
Knoxville, Tenn.	83 56	35 57	0	Eugene, Ore.	123 5	44 3	22 e
Nashville, Tenn.	86 47	36 10	3 e	Baker, Ore.	117 50	44 47	21 e
Memphis, Tenn.	90 3	35 9	6 e	Klamath Falls, Ore.	121 44	42 10	19 e
Birmingham, Ala.	86 50	33 30	3 e	Sacramento, Cal.	121 30	38 35	17 e
Montgomery, Ala.	86 18	32 21	3 e	San Francisco, Cal.	122 26	37 47	18 e
Mobile, Ala.	88 3	30 42	5 e	Fresno, Cal.	119 48	36 44	17 e
Jackson, Miss.	90 12	32 20	7 e	Los Angeles, Cal.	118 15	34 3	16 e
Indianapolis, Ind.	86 10	39 46	1 e	Needles, Cal.	114 36	34 50	15 e
Milwaukee, Wis.	87 55	43 2	2 e	San Diego, Cal.	117 10	32 42	15 e
Chicago, Ill.	87 37	41 50	2 e	El Centro, Cal.	115 33	32 48	15 e
Springfield, Ill.	89 38	39 48	4 e	St. John, N. B.	66 10	45 18	22 w
Duluth, Minn.	92 5	46 49	7 e	Quebec, Que.	71 11	46 49	20 w
Minneapolis, Minn.	93 14	44 59	7 e	Montreal, Que.	73 35	45 30	16 w
Dubuque, Iowa.	90 40	42 31	5 e	Ottawa, Ont.	75 43	45 24	14 w
Des Moines, Iowa.	93 37	41 35	7 e	Kingston, Ont.	76 30	44 15	12 w
Kansas City, Mo.	94 35	39 6	9 e	Toronto, Ont.	79 24	43 40	8 w
St. Louis, Mo.	90 12	38 35	5 e	London, Ont.	81 34	43 2	5 w
Springfield, Mo.	93 17	37 13	7 e	Port Arthur, Ont.	89 17	48 30	1 e
Hot Springs, Ark.	93 3	34 31	8 e	Winnipeg, Man.	97 7	49 54	11 e
Shreveport, La.	93 42	32 28	8 e	Moose Jaw, Sask.	105 31	50 37	18 e
New Orleans, La.	90 4	29 57	6 e	Calgary, Alta.	114 1	51 1	23 e
Fargo, N. D.	96 48	46 52	10 e	Nelson, B. C.	117 17	49 30	23 e
Bismarck, N. D.	100 47	46 48	14 e	Victoria, B. C.	123 21	48 25	24 e

CHRONOLOGY

GREAT HISTORICAL EVENTS

Compiled by
Encyclopaedia Britannica

Before the Christian Era—(B. C.)

- 4004—Creation of world, according to Archbishop Usher's chronology. (Science estimates earth is at least 2,000,000,000 years old.)
- 4000—The Flood, mentioned in the Bible. (Date set by science; Archbishop Usher fixed it at 2348.)
- 3100–1800—Egyptian pyramids built.
- 2700—Huang-Ti founds Chinese Empire.
- 2000—Indo-Europeans invade northern Greece.
- 1556—Athens, Greece, founded by Cecrops.
- 1400—Moses leads Israelites out of Egypt.
- 1194–1184—*The Trojan War*. Doric Greeks emerge supreme after legendary siege of Troy.
- 753—Rome founded by Romulus.
- 562—Buddha born.
- 551—Confucius born.
- 500—Rise of Maya civilization in Mexico.
- 500–479—*Persian Wars*. Persians, in four expeditions against Greece (493, 490, 480 and 479), fail in efforts at subjugation.
- 490—Battle of Marathon. Greeks under Miltiades defeat Persians.
- 431–404—*Peloponnesian War*. Spartans, under Lysander, take Athens in 404 to become supreme in Greece.
- 390—Barbarian Gauls sack Rome.
- 334–330—Alexander the Great conquers Greece, Persia, Egypt, and part of India.
- 264–146—*The Punic Wars*. Romans, in conquest against Carthaginians, seize Sicily and Spain, and destroy Carthage (later rebuilt by Caesar, destroyed by Arabs in 689 A. D.)
- 45—Caesar becomes dictator for life.
- 44—Caesar murdered, Anthony seizes Rome.
- 32–31—*War between Anthony and Octavius*. Octavius defeats Anthony, conquers Egypt.
- 30—Suicide of Anthony and Cleopatra.

27—Octavius becomes Emperor Augustus; Roman Empire established.

4—Birth of Christ (four years before so-called Christian era).

The Christian Era—(A. D.)

- 29—Crucifixion of Christ. Date set by some scientific calculations; Roman Catholic Church holds that Jesus died on Friday, April 3, 33.
- 64—Rome burns, Emperor Nero blames Christians.
- 79—Pompeii destroyed as Mt. Vesuvius erupts.
- 253–291—*The Franks invade Gaul* and spread over northwest Europe.
- 306—*Constantine the Great, first Christian Emperor, defeats the Franks*.
- 330—Constantine the Great, first Christian Emperor, changes Byzantium to Constantinople and makes it the seat of the Roman Empire.
- 400—Beginning of the Dark Ages. Visigoths overrun Europe.
- 597—Gregory, Bishop of Rome, establishes the Papacy.
- 611—Mohammed proclaims Islamism.
- 625–640—Mohammedanism sweeps the East.
- 700–800—Christianity spreads over northern Europe. Charlemagne founds a new western Roman Empire.
- 930—Vikings establish first parliament in Iceland.
- 982—Erik the Red (Thorvaldson), father of Leif Ericson, discovers Greenland.
- 1000—Leif Ericson sails from Iceland, discovers North American continent.
- 1066—*Battle of Hastings*.
- 1096–1291—*The Crusades*. European Christians, in seven periods of conflict, oppose the Moslems and the Turks, developing commerce and extending Christianity.
- 1206—Mogul (Tartar) Empire established by Genghis Khan.
- 1215—Magna Charta proclaimed at Runnymede, England.

- 1233—Pope Gregory IX establishes Inquisition in Spain.
- 1268—Mongol Emperor Kublai Khan establishes reign at Peking (now Peiping), China.
- 1337-1453—*Hundred Years War*. England loses lands in France.
- 1431—Joan of Arc burned at the stake.
- 1453—*Turks capture Constantinople*.
- 1485—Battle of Bosworth Field. Ends Wars of the Roses. Richard III slain.
- 1492—Christopher Columbus discovers America (Oct. 12).
- 1497—Amerigo Vespucci discovers South America; John Cabot sails from England to Newfoundland.
- 1513—Ponce de Leon lands in Florida (April 8); Balboa discovers Pacific Ocean (Sept. 25).
- 1517—Beginning of the Reformation in Germany.
- 1534—Papal power in England abolished.
- 1522—One of Magellan's ships circumnavigates the globe.
- 1564—Shakespeare born.
- 1571—*Tatars devastate Russia*; Moscow burned.
- 1571—Battle of Lepanto. Don John of Austria routs Turkish fleet.
- 1588—*Spanish Armada* destroyed by British (July 21-29).
- 1607—Jamestown, Va., settled by English Cavaliers under Capt. John Smith.
- 1618-1648—*Thirty Years' War*. German Protestants, England, Holland, France and Sweden against Roman Catholics of Germany and Spain and Italy. Peace of Westphalia ends conflict, Alsace going to France, Swiss independence being recognized, and German secularized states being given religious freedom.
- 1619—First representative assembly in America, Jamestown (July 30); first Negro slaves land in America from Dutch ship at Jamestown (August). First boatload of women landed at Jamestown, Va.
- 1620—Pilgrims land at Plymouth Rock (Dec. 21).
- 1644—Manchu Dynasty established in China, lasting until 1912.
- 1665—The Great Plague in London.
- 1676—Nathaniel Bacon leads Virginia farmers in tax rebellion.
- 1704—British capture Gibraltar from Spain.
- 1752—Benjamin Franklin, flying kite, discovers lightning to be identical with electricity.
- 1756-1763—*Seven Years' War*. France, Austria and Russia against England and Prussia. England wins Canada and supremacy in India and the West Indies, Prussia retaining Silesia.
- 1757—Battle of Plassey. Clive defeats French; marks beginning of British supremacy in India.
- 1765—Stamp Act passed by British Parliament. Stamp Act Congress in New York threatens boycott unless repealed.
- 1773—Boston Tea Party (Dec. 16).
- 1774—First Continental Congress, Philadelphia (Sept. 5).
- 1775-1783—*American Revolution*. Colonies revolt against the British.
- 1775—Battles of *Lexington* and *Concord* (April 19) and *Bunker Hill* (June 17).
- 1776—Declaration of American Independence (July 4); Battle of *Fort Mifflin* (June 28).
- 1777—Congress adopts *Stars and Stripes* (June 14); Battles of *Ticonderoga*, (July 6); *Brandywine* (Sept. 11); *Germantown* (Oct. 4); Burgoyne surrenders at Saratoga (Oct. 17).
- 1778—Battle of *Monmouth* (June 28); *Wyoming Massacre* (July 3).
- 1779—Battle of *Savannah* (Oct. 8-9).
- 1780—Battle of *King's Mountain* (Oct. 7). Maj. Andre hanged (Oct. 2) as spy conniving with Benedict Arnold.
- 1781—Battles of *Cowpens* (Jan. 17); *Yorktown* (Sept. 28-Oct. 19). Lord Cornwallis and British surrender.
- 1783—Peace treaty signed by United States and Britain (Sept. 3). Massachusetts outlaws slavery.
- 1787—U. S. Constitution drawn up at Philadelphia (May 14).
- 1789—First U. S. Congress meets (April 6); Gen. Washington inaugurated as first President (April 30).
- 1789-1799—*French Revolution*. Bastille in Paris destroyed (1789); *war with Germany*, France declared a republic (1792); King Louis and Queen beheaded, Reign of Terror begins (1793); Napoleon Bonaparte heads army; peace with Prussia (1795); *war in Italy* (1796); Napoleon made First Consul of the Republic (1799).
- 1790—Battle of *Poltava*. Russians under Peter the Great defeat Swedes under Charles XII.
- 1801—Britain and Ireland united; first parliament of the United Kingdom.
- 1803-1806—Journey of Lewis and Clark overland to U. S. Northwest.
- 1805—Battle of *Trafalgar*. Nelson's death and great victory over Napoleon (Oct. 21).
- 1807—Robert Fulton launches first steamboat, the *Clermont* (Aug. 17).

- 1812-1814—*War of 1812*. Declared (June 18) by U. S. because of blockade of ports by British, then engaged in struggle against Napoleon; *Fort Dearborn (Chicago) Massacre* by Indian allies of British (Aug. 15); *Detroit* surrendered to British (Aug. 16).
- 1813—Battle of *Leipzig* (Oct. 16-18); defeat of Napoleon.
- 1814—Napoleon deposed (March); Louis XVIII king of France. British burn the White House (Aug. 24); Battle of *Plattsburg* won by Americans (Sept. 11); U. S. signs treaty with Britain at Ghent, Belgium (Dec. 24).
- 1815—Battle of *New Orleans* (Jan. 8, 1815); Napoleon flees Elba (Feb. 26), returns to France (March 1), and is defeated by Wellington in the Battle of *Waterloo* (June 18).
- 1816—Clay's American System (First protective tariff) passed by Congress.
- 1819—The *Savannah* becomes first steamboat to cross the Atlantic, March 28-June 20.
- 1820—Missouri Compromise permits slavery in that state.
- 1823—Monroe Doctrine declares (Dec. 2) that no European power may seize territory or set up a government on American continent.
- 1828—Baltimore & Ohio establishes first passenger railroad in U. S. (July 4).
- 1830—Revolt in France; Charles X flees, Louis Philippe king.
- 1832—South Carolina nullifies U. S. protective tariff law.
- 1835—Texas proclaims independence from Mexico (Nov. 13).
- 1836—Battle of the *Alamo* (March 6).
- 1837—Queen Victoria rules England.
- 1846-1848—*Mexican War*. U. S. declares war (May 13, 1846) in boundary dispute; peace ratified (February, 1848); Texas boundary set at Rio Grande.
- 1848—Gold discovered in California (Jan. 24); French depose Louis Philippe, set up Second Republic.
- 1853—Commodore Matthew C. Perry, U. S. N., meets the Lord of Toda on Kurihama Beach, Japan (July 14), resulting in commercial treaty (1854).
- 1854-1856—*Crimean War*. Russia loses claim to Greek Christians under Turkish flag.
- 1856—John C. Fremont runs as first Republican Presidential candidate.
- 1857—Dred Scott decision of U. S. Supreme Court (March 6) holds a Negro slave not a citizen.
- 1858—Lincoln-Douglas debates in Illinois.
- 1859—John Brown's Raid on Harpers Ferry (Oct. 16).
- 1860—South Carolina secedes from the Union (Dec. 20).
- 1861—Seceding states proclaim Confederacy (Feb. 4); Jefferson Davis president.
- 1861-1865—*American Civil War*. Outstanding events: Battle of *Bull Run* (July 21, 1861); Battle of *Monitor and Merrimac* (March 9, 1862); *Shiloh* (April 6-7, 1862); *Seven Days* battle (June 26-July 2, 1862); *Antietam Creek* (Sept. 16-17, 1862); Lincoln's Emancipation Proclamation (Jan. 1, 1863); Battle of *Chancellorsville* near Kitty Hawk, N. C. (Dec. 17), (May 2-4, 1863), *Gettysburg* (July 1-3, 1863); Grant's capture of *Vicksburg* (July 4, 1863); Battle of *Chickamauga* (Sept. 19-20, 1863); *Lookout Mountain* (Nov. 24, 1863); *Sherman's March through Georgia* (ended Dec. 20, 1864); Battle of *Wilderness* (May 5-6, 1864); *Spotsylvania* (May 10, 1864); surrender of Gen. Lee at Appomattox (April 9, 1865), ending the conflict. Slavery ended and the Union preserved.
- 1865—Lincoln shot fatally on April 14 by John Wilkes Booth, died April 15.
- 1867—Alaska purchased from Russia by the U. S.
- 1869—Central Pacific and Union Pacific rail lines joined at Ogden, Utah (May 10), completing first transcontinental railroad.
- 1870-1871—*Franco-Prussian War*. Ended with Treaty of Frankfurt (May 10, 1871).
- 1871—Great fire in Chicago (Oct. 8-10), 18,000 buildings destroyed.
- 1873—Financial panic in New York.
- 1876—Battle of the *Little Big Horn* in Montana, massacre of Gen. Custer and 276 soldiers by the Sioux (June 25).
- 1881—Czar Alexander II of Russia assassinated by nihilists (March 13); President Garfield fatally shot (July 2).
- 1883—Pendleton Act establishes Civil Service Commission and Merit System.
- 1893—Charles E. Duryea tests first gasoline automobile at Springfield, Mass. (April 19).
- 1894-1895—*Chinese-Japanese War*. Japan wins Formosa.
- 1898—*Spanish-American War*. U. S. battleship *Maine* blown up in Havana harbor (Feb. 15); Dewey destroys the Spanish fleet at *Manila* (May 1); Charge of *San Juan Hill* (July 1);

- Cervera's fleet destroyed off *Santiago*, Cuba, by U. S. ships (July 3); peace signed (Aug. 12) with Spain ceding the Philippines and Puerto Rico. Radium discovered by the Curies.
- 1899—*Boer War* begins (Oct. 11) with resistance of the Dutch to the British government in the Transvaal (Boers surrendered May 31, 1902). Filipinos revolt (June 12); U. S. forces capture rebel leader, Aguinaldo (March 23, 1901).
- 1901—President McKinley fatally shot (Sept. 6); Marconi signals letter "S" by radio from England to Newfoundland (Dec. 12).
- 1903—Wright brothers make first flight near Kitty Hawk, N. C., December 17.
- 1904-1905—*Russo-Japanese War* over conflicts in Manchuria. *Port Arthur* surrendered to the Japanese (Jan. 2, 1905); peace treaty signed (Sept. 5); Japan emerges as a major power.
- 1906—San Francisco destroyed by earthquake and fire (April 18).
- 1911—First transcontinental flight (84 hours' flying time), New York to Pasadena, Calif. (Sept. 17-Nov. 4), by Charles P. Rogers; Roald Amundsen discovers South Pole (Dec. 14).
- 1912—Republic established in China (Feb. 12).
- 1912-1913—*Balkan Wars*. Bulgaria, Serbia, Greece and Montenegro allied successfully against Turkey; later Bulgaria attacked Serbia and Greece.
- 1913—Federal Reserve System established.
- 1914—Archduke Francis Ferdinand of Austria-Hungary assassinated at Sarajevo, Bosnia (June 28) by a Serb student, precipitating World War I.
- 1914-1918—*World War I*. Central Powers (Austria-Hungary, Germany, Bulgaria, Turkey) against the Allies (Serbia, Russia, Great Britain, France, Belgium, Japan, Greece, Rumania, Montenegro, Portugal, Italy and the United States). Underlying cause was German desire for expansion. Outstanding events: 1914—Austria declares war on Serbia (July 28); Germany declares war on Russia (Aug. 1); Britain declares war on Germany; President Wilson proclaims U. S. neutral (Aug. 4); first British Expeditionary Force lands in France (Aug. 16); Germans defeat Russians at *Tannenberg*, East Prussia (Aug. 31); Battle of the *Marne* (Sept. 6-10). 1915—German U-boat blockade of Great Britain begins (Feb. 18); steamship *Lusitania* sunk by German submarines (May 7). 1916—Battle of *Jutland* (May 31); Battles of the *Somme* (July-November); Germans turned back at *Verdun* (Sept. 3). 1917—Germany begins unrestricted submarine warfare; U. S. severs relations (Feb. 3), declares war (April 6); first American troops in France (June 26); first U. S. casualties (Nov. 3). (Among memorable battles in which U. S. troops participated were *Cambrai*, the *Somme*, the *Marne*, *St. Mihiel*, *Belleau Wood*, and the *Argonne*.) 1918—President Wilson's 14 Points of Peace speech (Jan. 8); Battle of the *Somme* (March 21-April 6); Battle of the *Aisne* (May 27-June 5); German retreat across the *Marne* (July 19); U. S. troops take *St. Mihiel* (Sept. 13); Battle of the *Meuse-Argonne* (Sept. 20-Nov. 11); British break *Hindenburg line* (Sept. 27); U. S. troops capture *St. Etienne* (Oct. 6); Allies take *Cambrai* (Oct. 9); Ostend, Bruges, and Lille fall to Allies (Oct. 17); Germans accept Wilson's terms (Oct. 20); U. S. troops reach Sedan (Nov. 7); cease firing order issued, armistice signed (Nov. 11).
- 1914—U. S. troops land at Vera Cruz, Mexico (April 21).
- 1916—Rasputin, the Mad Monk, slain in Petrograd (now Leningrad); Pancho Villa, Mexican robber-general, raids Columbus, N. M. (March 9).
- 1917—*Russian Revolution*. Bolsheviks, under Nicolai Lenin, seize power (Nov. 7).
- 1919—Treaty of Versailles signed (June 28); U. S. Senate rejects League of Nations (Nov. 19).
- 1920—National Prohibition goes into effect (Jan. 16); Woman Suffrage Amendment ratified in U. S. (Aug. 26).
- 1921—U. S., Great Britain, France and Japan agree to naval limitations.
- 1922—Fascist coup in Italy, Mussolini forms cabinet (Oct. 27-29); 14 Russian republics form Union (Dec. 20).
- 1923—Munich beer hall putsch led by Hitler is put down (March 9).
- 1924—Teapot Dome oil scandal.
- 1925—William Jennings Bryan and Clarence Darrow in Scopes evolution trial in Tennessee.
- 1926—Richard E. Byrd flies to the North Pole.
- 1927—Charles A. Lindbergh flies solo across Atlantic (May 20-21).
- 1928—Kellogg Peace Pact signed.
- 1929—German airship *Graf Zeppelin* flies around the world, August.
- 1929—Stock market collapses, depression begins (Oct. 29).

HEADLINES OF THE YEARS

1930-1945

Compiled by

The

NEW YORK

Herald

Tribune



1930 On a crisp fall morning in October, 1929, the N. Y. Stock Market plunged downward. In a few hours, thousands of paper fortunes and some real ones were wiped out. The nation awoke as if at the shrill clatter of an alarm clock. This was the end of an era. Some months before that historic morning in Wall Street, the nation's economic machinery had been creaking ominously and slowing down. Now, as winter came on, unemployment spread, gloom and worry were in the air. In this uneasy atmosphere 1930 came in.

Jan. 9 Humbert, Italian Crown Prince, and Princess Marie of Belgium wed in Rome.

22 George V opens five-power naval parley in London.

26 Primo de Rivera quits after ruling Spain with iron fist 6½ years.

Feb. 2 William Howard Taft, III, resigns as Chief Justice; Pres. Hoover names Charles E. Hughes.

20 Richard E. Byrd and party quit Antarctica after year.

Mar. 6 Communists in nationwide demonstration meet with tear gas at White House.

7 Hjalmar Schacht resigns as Reichsbank head, protesting Young Plan terms.

10 Wickersham Committee reports complete breakdown of prohibition enforcement.

11 Babe Ruth signs biggest contract in baseball history, \$160,000 for 2 years.

13 Discovery of ninth planet (Pluto) announced by U. S. astronomers.

25 German liner *Europa* makes new transatlantic record, 4 days, 17 hours, 6 minutes.

28 William T. Cosgrave resigns as president of Eire after defeat in Eire.

April 20 Charles A. Lindbergh sets cross-continent air record, 14 hours, 45 minutes.

22 Navy pact signed by U. S., Britain, Japan, France and Italy.

May 5 Mahatma Gandhi arrested.

7 Senate rejects John J. Parker for Supreme Court because of anti-labor record.

17 European Federation urged by Aristide Briand in notes to twenty-six nations.

June 14 House passes Smoot-Hawley tariff.

22 Son born to Lindberghs.

July 7 Sir Arthur Conan Doyle, creator of Sherlock Holmes dies, promises to communicate from spirit world. (*Never does.*)

17 Britain rejects Briand's plan for a United States of Europe as unnecessary.

Aug. 17 Dale Jackson and Forest O'Brine set endurance air record—647 hours over St. Louis.

23 Bodies of S. A. Andree and companions who tried to cross North Pole in balloon in 1896 found.

25 Samuel Seabury named to investigate N. Y. C. Magistrates Courts.

Sept. 2 Dieudonne Coste and Maurice Bellonte complete Paris-to-N. Y. non-stop in 37 hours, 17 minutes. J. P. Crater, New York Supreme Court Justice wanted in investigation missing. (*Never found.*)

6 Argentine troops seize capital. 1,100 dead or hurt as Junta ousts Martinez.

23 Soviets selling Old Masters; Mellon buys \$800,000 worth.

27 Robert T. Jones wins golf grand slam by taking U. S. Amateur.

Oct. 5 British air minister and 45 killed as R-101, world's largest airship, crashes over France.

9 Forty-six U. S. warships decommissioned as Navy economizes.

24 Military chiefs seize Rio, capture Brazil's president; mobs riot, twenty-seven dead.

Nov. 2 Haile Selassie crowned Emperor of Ethiopia in barbaric ceremony.

4 Franklin D. Roosevelt reelected Governor of N. Y. Democrats gain throughout nation.

14 Police cars and trucks rush food to 8,849 hungry N. Y. families.

17 Strikes sweep Spain; riots in Barcelona as 200,000 workers quit.

19 Vatican linked by phone to outside world; first call from Cardinal Hayes.

21 Stalin in first interview with U. S. reporter urges U. S. trade with Soviet Union.

Dec. 2 Hoover asks Congress for \$150,000,000 to aid unemployed.

11 New York's Bank of United States, with 62 branches, 400,000 depositors, closed by State—insolvent.

12 Sinclair Lewis, accepting Nobel prize at Stockholm, derides U. S. culture, traditions, standards.

28 Treasury reveals 511 in 1928 had incomes of \$1,000,000 or more; 26 had \$5,000,000 or more.

DIED: Kenneth Hawks, Jan. 2; Mabel Normand, Feb. 23; William Howard Taft, Mar. 8; A. Conan Doyle, July 7.

1931 All the world was restless. Rioting in Cuba and Spain, revolutionary rumblings in South and Central America (the Marines were in Nicaragua), Fascist bluster in Italy told of world-wide ferment in economics and politics. Here in the U. S. the depression deepened. A worried President summoned groups of anxious businessmen to the White House; neighborhood soup kitchens were set up to feed the hungry. Christmas shoppers looked away as they passed jobless, shivering men selling apples on street corners. A song that caught the imagination was "Brother, Can You Spare a Dime?" The answer, as 1931 began, was generally "No."

Jan. 2 Eight U. S. Marines killed, 2 wounded in ambush by Nicaraguan rebels.

9 Soviet budget 16 billions, a world's record, with immense outlays for industry; private trade sinks to vanishing point.

20 Wickersham Board favors dry law revision; Hoover opposes modification, urges further trial of "noble experiment."

29 U. S. apologizes to Italy for alleged slur by Maj. Gen. Smedley Butler on Mussolini.

Feb. 5 Malcolm Campbell sets new speed record in auto, 245.733 miles per hour at Daytona, Fla.

24 Supreme Court holds 18th (Prohibition) Amendment constitutional.

27 The New York *World* suspends; sold by Pulitzers to The *Telegram*.

U. S. Senate passes soldiers' bonus.

Mar. 23 N. Y. Legislature orders investigation of N. Y. City affairs; Gov. Roosevelt calls on Mayor James J. Walker to meet charges.

28 Paul von Hindenburg assumes rule of Reich as dictator "to curb radical excesses."

31 Knute Rockne killed in air crash over Kansas.
1,000 die in earthquake at Managua, Nicaragua.

April 7 Anton J. Cermak elected Mayor of Chicago, defeating "Big Bill" Thompson.

14 Alfonso signs abdication, quits Spain with family. Niceto Alcalá Zamora president.

28 Roosevelt clears Walker; holds charges "too general."

May 1 Empire State, tallest building in world, opens; 102 stories, 1,100 feet.

7 Francis (Two-Gun) Crowley, youthful killer, captured after spectacular battle with N. Y. police.

Arturo Toscanini cuffed, slapped by Italian youths at Bologna for refusal to play Fascist anthem.

28 Auguste Piccard and Henry Kipper up 52,493 feet over Alps in balloon testing stratosphere rays.

30 Mussolini closes "Catholic Action" in Italy charging political activity.

June 6 Navy to drop base at Guam, no longer of military value.

20 Hoover proposes world debt moratorium for one year; Congress backs plan to save Reich.

July 2 Post and Gatty back at Roosevelt Field, completing circuit of globe in 8 days, 15 hours, 51 minutes. Previous record (Graf Zeppelin) 12½ days.

Aug. 9 Revolt fails in Cuba; ex-President Mario G. Menocal, rebel leader, flees.

24 J. Ramsay MacDonald resigns as Prime Minister of Britain.

Sept. 19 Japan seizes Mukden, Manchuria.

Oct. 24 Al Capone gets eleven years and \$50,000 fine for tax fraud.

25 George Washington Bridge opens.

Nov. 4 Japan is cited before League of Nations for trespassing in Manchuria.

5 MacDonald is Prime Minister, Stanley Baldwin is Lord President of Council in Britain.

11 Charles G. Dawes ordered to Paris to aid League in settling Manchurian conflict.

12 \$59,000,000 Naval appropriations slash ordered by Hoover.

29 Japan rejects, while China accepts, League survey in Manchuria.

Dec. 2 Dr. Robert A. Millikan brings from Germany pictures of atom smashing with cosmic rays.

8 Chancellor Heinrich Brüning of Germany slashes wages and prices by decree . . . says he will use martial law to curb Hitler.

22 War debt moratorium is ratified in Senate.

DIED: Nellie Melba, Feb. 22; Ella V. Wendel, Mar. 13; Arnold Bennett, Mar. 27; Knute Rockne, Mar. 31; Nicholas Longworth, Apr. 9; Mrs. White-law Reid, Apr. 29; George F. Baker, May 2; David Belasco, May 14; Ralph Barton, May 20.

1932 People were dissatisfied with Prohibition. The Wickersham Committee survey disclosed the monumental traffic in alcohol, the organized and amply financed gangsterism that everyone knew about. Hoover and Congress vacillated. The Depression still plagued industry, merchandising, real estate. The nation's business seemed stalled on dead center. That gloomy, listless December, the nation's ear was tuned to shuffling cards, and public interest focussed on a bridge table where Sidney Lenz and the Culbertsons played an epic contract bridge match to determine the merits of their systems of bidding.

- Jan.** 9 Bruening notifies world Germany is unable to pay reparations.
 12 Hattie W. Caraway, Ark., elected to U. S. Senate, first woman elected to that body.
 24 Samuel Seabury indicts Tammany for New York misrule, after six months investigation.
 29 Japanese invade Shanghai; U. S. warns Tokyo to respect American rights.
- Feb.** 3 Andrew Mellon named Ambassador to England; Ogden Mills Secretary of Treasury.
 15 Hoover names Benjamin N. Cardozo to U. S. Supreme Court, succeeding Oliver Wendell Holmes (retiring).
 27 James Chadwick, British scientist announces discovery of neutron, smallest particle.
- Mar.** 1 Lindbergh baby kidnaped at Hopewell, N. J.
 7 4 killed as 3,000 riot for jobs at Ford plant near Detroit.
 12 Ivar Krueger, Swedish "Match King" suicide.
 13 Von Hindenburg beats Adolf Hitler in German presidential elections, but fails to get majority.
 14 George Eastman, Kodak manufacturer and philanthropist, a suicide at 77.
- April** 4 Vitamin C isolated after 5-year search by Dr. C. G. King, University of Pittsburgh.
 7 Roosevelt makes "Forgotten Man" speech on radio, setting keynote of his campaign for President.
 9 Lindbergh paid \$50,000 ransom over Bronx Cemetery Wall (Apr. 2), New Jersey police announced.
 10 Hindenburg beats Hitler in runoff by 5,900,000 votes; bans SS troops.
- 13 Receivers asked in Chicago for Samuel Insull's \$1,300,000,000 utility empire.
- May** 1 Soviet turns on world's biggest electric power plant at Dnieprostroy.
 7 French President Doumlier killed by Russian fanatic.
 12 Lindbergh baby found slain in brush-pile.
 15 Japanese Premier Tsuyoshi Inukai assassinated.
 20 Amelia Earhart Putnam makes solo flight from Harbor Grace, Newfoundland, to Culmore, Ireland; first woman to fly Atlantic alone.
- June** 2 Bonus Army of 3,500 reported marching on Washington from North, Central, Middle West States.
 5 John D. Rockefeller, Jr., calls for Repeal; declares Prohibition has failed.
 16 Hoover renominated, Charles Curtis for Vice President; Republicans reject repeal, advocate state option.
- July** 1 Democrats nominate F. D. Roosevelt on 4th ballot.
 7 House passes 2-billion-dollar Garner-Wagner relief bill.
 11 Hoover vetoes relief bill.
 21 Franz Von Papen seizes German government, puts Army in charge after Nazi-Communist rioting.
 28 U. S. Army under Gen. Douglas MacArthur drives Bonus Army out of Washington with tanks, tear gas; 1 killed by police bullet.
- Aug.** 30 Hermann W. Goering elected Reichstag president; Von Papen continued as Chancellor.
 31 Germany demands arms equal to other nations.
- Sept.** 1 Mayor Walker of New York resigns during ouster proceedings before Roosevelt.
 9 39 killed, 72 hurt as ferry blows up in East River.
 30 London: mass demonstrations of hunger marchers stopped by police in Whitehall.
- Nov.** 6 Supreme Court orders retrial of Scottsboro Case.
 8 Roosevelt wins in Democratic landslide: Congress wet, overwhelmingly Democratic.
 22 Roosevelt confers with Hoover at White House.
- Dec.** 5 Repeal loses by six votes in House.
 21 House votes 3.2 beer.

1933 Roosevelt was in; Hoover out. Roosevelt was fitting cabinet pieces together, making plans. Hoover was packing his papers. In the long pause from November to March, the rolls of jobless mounted and the nation grew more jittery. From Germany, increasingly turbulent and truculent, the name "Adolf Hitler" came more and more into the news. It was the year of the N. R. A. and the "blue eagle" and the year Prohibition ended. "The only thing we have to fear is fear itself," said Roosevelt in his inaugural speech.

- Jan.** 4 Iowa farmers threaten to lynch insurance company representative for farm foreclosure.
- 5 Ex-President Calvin Coolidge dies of heart attack at Northampton, Mass.
- 19 Soviet exiles 45,000 Cossacks to Siberia as grain slackers.
- 30 Hitler made Chancellor of Germany.
- Feb.** 1 Hitler ends Reichstag; calls for referendum; pledges fight on Marxism, jobs for all.
- 10 League of Nations demands Japan surrender conquests in China.
- 13 Hoover urges world to stabilize currencies, return to gold.
- 14 Gov. Comstock of Michigan proclaims bank holiday; \$50,000,000 rushed to Detroit.
- 15 Roosevelt escapes death as assassin's bullet fells Mayor Cermak of Chicago at Miami. Police seize Giuseppe Zangara, fanatic.
- 21 House sends repeal proposal to state conventions. Japan bolts League of Nations.
- 25 Bank crisis sweeping nation; Congress gives Treasury extraordinary powers.
- 28 Reichstag set afire; Nazi's blame Communists. Hitler suspends civil rights.
- Mar.** 4 Capital of Jehol in north China falls to Japanese.
- Roosevelt inaugurated; promises wartime action to defeat Depression.
- 5 Roosevelt proclaims bank holiday; bans hoarding; embargoes gold.
- Reichstag votes absolute power to Hitler.
- 8 Roosevelt plans new money to open banks at once; gold called in.
- 10 127 die, 4,150 injured in Long Beach, Calif., earthquake.

- 12 President Roosevelt broadcast first "Fireside Chat."
- 14 Congress votes 3.2 beer.
- 15 Exchanges reopen, stocks up.
- 21 Roosevelt offers plan for 250,000 Civilian Conservation Corps jobs.
- C. E. Mitchell, former National City Bank chairman, arrested for income tax evasion; acquitted in subsequent trial.

- 23 Reichstag confers blanket powers on Hitler; gives up legislative authority for 4 years.
- 27 Federal employees pay cut 15 percent; drop of 21.7 percent in living cost since 1928.
- 30 Nazis boycott Jews; order labels on all Jewish stores.

- April** 3 Airship Akron falls in sea off Jersey; Rear Adm. Wm. A. Moffett and 72 lost.
- Michigan first state to vote repeal.
- 7 Beer barrels roll as 3.2 brew becomes legal.
- 9 Scottsboro boys found guilty again.

- 19 U. S. goes off gold standard.
- 21 Roosevelt and Prime Minister MacDonald meet for recovery talks.
- 24 5,000 school teachers storm Chicago banks for 30 millions back pay.

- May** 1 Hitler orders labor for rich and poor, compulsory toll for all.
- 12 Farm and relief bills totalling \$5,000,000,000 signed by President.
- 15 U. S. refuses to join Britain and France for three-power action against Hitler.
- 16 Roosevelt calls on world for non-aggression pact.
- 17 Hitler accepts, demands equality for Reich.
- 18 Hugh A. Johnson named N. R. A. administrator.
- 23 New York votes 20 to 1 for repeal. J. P. Morgan & Co. assets dropped \$255,673,843 since 1929, Senate committee told.

- 27 Century of Progress exposition at Chicago opens.

- June** 7 Italy, Britain, France, and Germany sign 4-power pact for ten-year peace at Rome.
- 12 London Economic Conference opens.
- 16 Roosevelt signs N. R. A. bill, opens recovery drive; 5,000,000 jobs his goal.

- 22 Hitler proscribes all political parties except National Socialists.
- 29 London Economic Conference begs Roosevelt for stabilization agreement; warns of collapse, currency war.
- July 1 Roosevelt rejects gold bloc stabilization plan.
- 10 Hitler wants Germany 100 percent Nazi, forbids rival parties "forever."
- 11 "Super-Cabinet" formed to direct U. S. Recovery.
- 12 Blanket industrial code offered to force wages to higher levels; 40 cents an hour minimum.
- 19 Italo Balbo leads 24-plane armada to N. Y. after transatlantic journey to Chicago Fair.
- 20 Stocks break 5 to 20 points; worst break in 3 years.
- 22 Wiley Post completes solo globe circuit in 7 days, 18 hours, 45 minutes.
- 27 World Economic Conference adjourns, blaming U. S. for wrecking its work. British adopt Empire fiscal policy.
- Aug. 3 Fusion nominates F. H. LaGuardia for Mayor of New York City.
- 5 U. S. strike truce signed by Industry and Labor; Sen. Robert F. Wagner heads Mediation Board.
- 7 Reich scorns Anglo-French notice to stay out of Austria.
- 26 killed in riots in Havana.
- 12 President Gerardo Machado flees as mob sacks presidential palace in Cuba.
- 13 Roosevelt sends warship to Cuba.
- 14 Guglielmo Marconi proves micro-waves carry further than horizon.
- 27 Raymond Moley resigns from Roosevelt "brain trust."
- Sept. 1 Hitler insists Jewry be uprooted in Germany.
- 6 Radicals seize power in Cuba.
- 10 Jews organize consumer drive to boycott Nazi products.
- 13 200,000 New Yorkers participate in 10-hour parade up Fifth Avenue for N. R. A.
- 14 Seething Cuba under dictator rule by Dr. Ramon Grau San Martin.
- Oct. 1 Harry L. Hopkins named Federal relief head.
- 3 Engelbert Dollfuss, Austria, wounded by Nazi fanatic.
- 14 Hitler bolts League of Nations and arms parley at Geneva.
- 16 U. S. remaining aloof in Europe, Norman H. Davis tells Geneva Conference.
- 17 Dr. Albert Einstein, refugee from Germany, arrives in United States, settles in Princeton, N. J.
- 22 Roosevelt begins dollar control, directs R. F. C. to buy gold in world markets.
- 25 Gold price set at 31.36, 27 cents above world price.
- Nov. 7 F. H. La Guardia elected New York Mayor; Thomas E. Dewey elected District Attorney.
- 8 Cuba in state of war again.
- 11 France bars concessions to Hitler; disagrees with British policy.
- 12 Hitler wins 93 percent vote in referendum on Nazi foreign policy.
- 15 William H. Woodin, ill, out as Secretary of Treasury; Morgenthau named to replace him.
- 16 British conciliate Germany with new arms concessions.
- 17 U. S. and Russia resume full relations (as of 11:50 P. M. Nov. 16); Soviet gives list of guaranties including pledge "to refrain from propaganda against the policies or social order of the U. S."
- 26 California mob storms jail, lynches two kidnap slayers at San Jose; Gov. Rolfe defends action of lynch mob.
- 28 Lynching wave spreads as Missouri mob hangs, burns Negro at St. Joseph and Maryland mob fights posse to free four lynch suspects.
- Dec. 5 Prohibition ends in U. S. as Utah, 36th state ratifies repeal at 5:22 P. M.
- 18 Chaco truce ends boundary war between Paraguay and Bolivia.
- 21 Roosevelt orders silver purchased and coined in new inflation move.
- 22 Crown Prince born to Emperor Hirohito and Empress Nagato of Japan.
- 23 200 dead in French railroad wreck 17 miles east of Paris.
- 24 Assassins stab to death Armenian Archbishop marching to altar in New York church.
- DIED: Calvin Coolidge, Jan. 5; Thos. J. Walsh, Mar. 2; Anton J. Cermak, Mar. 6.

The New Deal delved into the alphabet and came up with multi-lettered agencies. Mr. Roosevelt's resonant voice roused and reassured the nation in fireside chats. The Blue Eagle flapped. People talked about Section 7-A, codes, N. R. A., C. C. C., farm relief, cracking down on chiselers, and boondoggling. The little guy (it seemed) was coming into his own at last. Prohibition was finished. The nation enjoyed its first legal alcoholic holiday in fifteen years. New York had double cause to celebrate: Tammany was out in the cold for the first time since 1918.

- Jan. 4 Roosevelt notifies Congress recovery program will cost \$10,000,000,000 by June 30, 1935.
- 10 Van Der Lubbe, Dutch communist, beheaded for Reichstag fire.
- 11 6 Navy planes fly from California to Hawaii in 24¾ hours.
- 31 Dollar cut to 59.6 cents (gold value).
- Feb. 6 20 dead in Paris riots as Daladier's government resigns.
- 12 France paralyzed by general strike. Civil war in Austria, 500 dead.
- 17 Britain, France, Italy send note to Hitler backing Dolfuss government in Austria.
- 19 Nazis send ultimatum to Dolfuss.
- Mar. 1 Henry Pu-yi becomes Emperor Kang-teh of Manchukuo. (Manchukuo was Japan's new name for Manchuria.)
- 10 Roosevelt orders return of air mail to civilian lines after ten Army casualties in 20 days.
- 15 Samuel Insull, disguised as woman, flees Athens to evade extradition to U. S.
- 24 Roosevelt signs Philippine Independence Bill.
- 28 Roosevelt gets first setback in Congress as his veto of Patman bonus bill is overridden.
- April 13 4,700,000 U. S. families on relief, Hopkins reports.
- 30 U. S. rejects Japanese claim of hegemony in China.
- May 10 Severe drought in Midwest brings dust storms.
- 28 Quintuplets born to Mrs. Olivia Dionne, at Corbell, Ont.
- June 14 Germany declares six-months moratorium on all foreign debts.
- 29 Gov. William Langer, North Dakota, sentenced to eighteen months in prison for conspiracy to defraud.
- 30 Hitler "purge" kills Ernest Roehm and score of other Nazi leaders.

- July 4 Madame Curie, co-discoverer of radium, dies at 66.
- 15 Famine threatens San Francisco in general strike; all unions go out in sympathy with longshoremen and marine workers.
- 19 San Francisco strike settled.
- 24 Heat, drought blanket Midwest "dustbowl."
- 25 Engelbert Dolfuss, Austrian Chancellor, assassinated.
- Aug. 2 Hindenburg dies; Hitler becomes absolute dictator of Germany.
- 9 U. S. nationalizes silver, to pay 50.01 cents an ounce.
- 11 Dr. William Beebe descends ½ mile in ocean in bathysphere, deepest in history.
- 26 Hitler asks return of Saar to Germany.
- 31 Huey Long enters New Orleans with troops; plans to investigate political enemies.
- Sept. 5 325,000 out in textile strikes.
- 8 164 die, many missing as liner *Morro Castle* burns off N. J.
- 20 Bruno Richard Hauptmann arrested for Lindbergh kidnap-slaying.
- 25 Gen. Hugh Johnson resigns as N. R. A. administrator.
- Oct. 6 Catalonia secedes in Spain; Reds riot, civil war threatens.
- 9 King Alexander I of Yugoslavia and French Foreign Minister Barthou assassinated at Marseilles by Croatian.
- Nov. 4 Charles Kingsford-Smith flies from Honolulu to California in 14 hours, 59 minutes.
- 6 Democrats gain Congress strength in New Deal election victories;
- 21 Japan asks naval parity; warns of intention to terminate 1922 Washington agreement.
- Dec. 3 France and Germany sign Saar Treaty.
- 5 Russia "purges" [executes] 66 for plotting with Germans against Stalin regime.
- 19 Japanese Privy Council votes to abrogate Washington Naval Treaty of 1922.
- 26 Ethiopia protests to League of Nations against Italian seizures.
- 29 Japan formally denounces 1922 naval treaty.

DIED: Albert I of Belgium, Feb. 17; Wm. H. Woodin, May 3; Von Hindenburg, Aug 2.

1935 In Europe the dictators grew more arrogant. Mussolini cried aloud his dreams of Roman grandeur from the Quirinal balcony. In far-off Ethiopia dark warriors primed muskets and sharpened spears. Hitler eyed Austria and the Ruhr.

But why worry? America was climbing out of the Depression, we hoped, business was stirring and money was channeled through relief rolls to the distressed and the hungry. Except for outraged cries from the Liberty League, the New Deal forged ahead.

- Jan.** 2 Bruno Richard Hauptmann goes on trial at Flemington, N. J., for kidnap slaying of the Lindbergh baby.
- 4 Roosevelt asks 3,500,000 jobs to end dole.
- 7 Oil control unconstitutional, Supreme Court decides in first New Deal test.
- 14 Saar plebiscite 90 percent for reunion with Germany.
- 24 Liner *Mohawk* sinks after collision off N. J. coast; 34 dead.
- 29 Senate rejects World Court.
- Feb.** 10 Italian troops clash with Ethiopians.
- 13 Hauptmann guilty.
- Mar.** 1 Saar is returned to Germany.
- 6 22,000,000 on U. S. relief rolls.
- 16 Hitler scraps Versailles Treaty by reestablishing universal military training in Germany.
- 27 Hitler demands union with Austria.
- April** 1 Scottsboro boys win new trial.
- 8 Adolph S. Ochs, New York *Times* publisher dies at 77.
- 14 Britain, France, Italy warn Reich for treaty violation.
- May** 12 Marshal Pilsudski, Polish Dictator dies.
- 18 Largest land plane crashes after collision over Moscow; 49 killed.
- 24 9-year-old George Weyerhauser of wealthy lumber family kidnaped at Tacoma, Wash.
- 27 Supreme Court unanimously voids N. R. A.
- June** 1 Weyerhauser returned after payment of \$200,000 ransom.
- 3 SS *Normandie* on maiden voyage, crosses Atlantic in 4 days, 11 hours; new record.
- 7 Pierre Laval again becomes Premier of France.
- J. Ramsay MacDonald, Labor Prime Minister resigns; Stanley Baldwin heads new Conservative government in Britain.
- 10 China yields to Japan in north, surrenders rule over Peiping, Tientsin.
- 14 Roosevelt signs stop-gap N. R. A.
- 19 Anglo-German naval pact gives U-boat parity.
- Senate passes Wagner Labor Relations Act, Social Security Act and A. A. A.
- July** 5 Roosevelt signs Wagner Act.
- 17 More than 80,000 Jews have quit Germany.
- Aug.** 15 Will Rogers and Wiley Post killed in plane crash in Alaska.
- 21 Senate votes for neutrality, ban on arms sale to belligerents in Ethiopia crisis.
- 29 Queen Astrid of Belgium is killed in auto crash.
- 30 Haile Selassie cedes oil rights in half of Ethiopia to American and British interests in an effort to stop Italy.
- Sept.** 3 U. S. State Department forces oil promoters to cancel Ethiopia concession.
- Hundreds dead in Florida hurricane.
- 8 Huey Long shot at Louisiana capitol; his assailant killed by guards. Long died September 10.
- 15 Jews deprived of citizenship by Nazis; ghettos revived.
- 18 Manuel Quezon elected first president of Philippines.
- 21 Mussolini rejects League's peace plan for Ethiopia.
- Oct.** 2 Ethiopia invaded.
- 3 Italians bomb Adowa, kill 1,700.
- 23 Dutch Schultz shot by gangsters in Newark, N. J., cafe; dies next day.
- Nov.** 3 King George II recalled to Greek throne in plebiscite.
- 11 Army pilots climb 14 miles in stratosphere flight.
- 22 First airmail flight across Pacific to Manila.
- 27 Japanese strike at Peiping.
- Dec.** 9 Supreme Court denies Hauptmann appeal; to die Jan. 13.
- 14 Thomas G. Masaryk resigns as President of Czechoslovakia.
- 22 Anthony Eden becomes England's Foreign Secretary; urges sanctions against Italy.
- DIED:** Sen. Bronson Cutting, May 6; Aircraftman T. E. Shaw ("Lawrence of Arabia"), May 19; Jane Addams, May 21; Col. Alfred Dreyfus, 75, July 12; Billy Sunday, 72, Nov. 6.

- 1936** The fuse was lit in Ethiopia and North China. As war rumbled along those far-off horizons, the U. S. sidled behind a "Neutrality Act" and fought shy of foreign entanglements. This time, we said, we will have no truck with foreign wars. As for domestic conflict, John L. Lewis had just punched Bill Hutcheson in the nose and the boys were choosing up sides for Labor's great civil war between the A. F. of L. and C. I. O. It was, in fact, an exciting time for Labor, what with the generous new Wagner Act and the introduction of the sit-down strike. The New Deal was in the saddle, FDR had signed the Social Security Act and another national election was coming up.
- Jan.** 3 President Roosevelt reaffirms backing of drastic neutrality law.
6 A. A. A. crop control program declared unconstitutional by the Supreme Court.
15 Japanese withdraw from naval conference at London.
20 King George V, of England, dies at 70; Prince of Wales, 41, succeeds to the throne as Edward VIII.
27 Bonus bill becomes law after seventeen years of wrangling.
- Feb.** 13 Leon Blum clubbed by group of royalists; Action Française, royalist party, is outlawed as a result.
17 Tennessee Valley Authority's power program upheld by Supreme Court.
25 Army seizes power in Japan; Tokyo under martial law; five cabinet ministers slain.
- Mar.** 1 10,000 Ethiopians slain, two armies routed.
7 Hitler sends German troops into the Rhineland, defying treaty at Versailles; scraps Locarno pact.
8 Italians halt war in Ethiopia to discuss peace.
10 France and Belgium insist on military sanctions against Germany.
29 Hitler receives 98.79 percent vote in German elections.
31 Japanese troops invade Mongolia; Russians angry.
- April** 3 Bruno Richard Hauptmann electrocuted in Trenton, New Jersey.
7 Great Britain gives League evidence Italy is using poison gas in Ethiopia.
- May** 2 Emperor Haile Selassie flees Ethiopia.
5 Italian army occupies Addis Ababa; war is over, Mussolini claims.
- 9 Dirigible Hindenburg, starting round-trip flights to the United States from Germany, lands in Lakehurst, New Jersey, 61 and a half hours after take-off.
- 18 Guffey Coal Act found constitutional by Supreme Court.
- June** 4 500,000 strikers are out as Leon Blum's Socialist government, France's first, takes office.
11 Alf M. Landon, of Kansas, nominated for President by Republican Convention at Cleveland.
27 Franklin D. Roosevelt is renominated for President.
- July** 1 League of Nations powers refuse to recognize Italian conquest of Ethiopia.
20 Civil war sweeps Spain; Barcelona and Seville are bombed.
- Aug.** 5 Premier General John Metaxas declares dictatorship in Greece under King George II.
12 Germany agrees to non-intervention in Spain.
- Sept.** 25 France devaluates the franc in accord with the United States and Great Britain.
- Oct.** 3 France slashes its tariffs from 15 to 20 percent in bid for world trade.
14 Belgium renounces French alliance.
- Nov.** 3 President Roosevelt, Governor Herbert H. Lehman, of New York, win election in sweeping Democratic victories throughout nation.
18 Italy and Germany recognize Franco's regime in Spain.
- Dec.** 10 George VI King of England as Edward VIII abdicates to wed Mrs. Simpson. Next day he leaves England as Duke of Windsor, following "Woman I Love" speech.
15 Twenty-one American republics sign neutrality pact.
25 Generalissimo Chiang Kai-shek, dictator of China, is released thirteen days after being kidnaped by forces of Marshal Chang, former war lord, in mutiny.
- DIED:** John F. Hylan, 67, Jan. 12; Rudyard Kipling, 70, Jan. 18; Charles Curtis, 76, Feb. 8; Finley Peter Dunne, 68, Apr. 24; Speaker Jos. W. Byrns, June 4; Gilbert K. Chesterton, 62, June 14; Admiral William S. Sims, 77, Sept. 28; Jesse I. Straus, 64, Oct. 4; Sen. James Couzens, 64, Oct. 22; Mme. Ernestine Schumann-Heink, 75, Nov. 17; Arthur Brisbane, 72, Dec. 25.

1937 Now Spain was a battleground of weapons and clashing ideas. The Dictators had become a blustering team and there was no one to call their bluff. In Moscow the Kremlin produced a fantastic purge of traitors and weaklings and confused Bolsheviks.

In the U. S. Franklin Roosevelt was about to begin his second term after brushing off the Landon challenge. The Republican Party's representation in Congress had dwindled to a handful. A confident FDR was about to launch his scheme against the 'Nine Old Men' on the U. S. Supreme Court.

- Jan. 2 Britain signs pact with Italy in effort to split Duce from Hitler.
- 4 10,000 Italian troops land in Spain.
- 20 Howard Hughes crosses U. S. in 7 hours, 30 minutes.
Roosevelt takes oath for 2nd Term; pledges end to poverty.
- 23 17 Moscow defendants confess they helped Trotsky plan to undermine Soviet.
- 30 Hitler scraps Versailles war guilt clause.
- Feb. 2 Sit-down strikers at Flint defy Court order.
- 5 Roosevelt asks power to enlarge Supreme Court to 15 Justices; new appointments would offset elderly members who refuse to retire.
- 23 1,400 Ethiopians executed for attack on Gen. Rodolfo Graziani.
- 26 J. S. Farnsworth, ex-Navy officer, convicted of conspiracy to sell navy secrets to Japs.
- Mar. 1 Steel plants raise wages to \$5 per day; grant 40-hour week.
- 18 450 pupils die in Texas school explosion.
- 22 Hughes, Brandels, Vandevanter oppose extra Justices as impairing Court's efficiency.
- 30 Supreme Court backs minimum pay act.
- April 12 Supreme Court upholds Wagner Act.
- 26 Survey reveals jobs at 1929 level.
- 30 Franco battleship sunk by Loyalist plane, 700 drown.
- May 6 Italy and Germany agree to help Franco fight on, and attack Madrid anew.
- 7 Hindenburg explodes at Lakehurst; 36 die as world's largest dirigible falls in flames.
- 12 George VI crowned in London.
- 19 Senate committee rejects Roosevelt Court plan, 10-8; Vandevanter, 78, resigns.

- 23 John D. Rockefeller dies at 97; gave away \$700,000,000.
- 24 Social Security upheld by Supreme Court.
- 25 A. F. of L. declares war on C. I. O.
- 26 Steelworkers strike.

28 Neville Chamberlain becomes Prime Minister of Britain, succeeding Baldwin.

June 3 Duke of Windsor, former Edward VIII, weds Wallis Warfield Simpson.

22 Joe Louis wins heavyweight title, knocking out James J. Braddock.

July 2 Amelia Earhart Putnam missing in Pacific in round-the-world flight; Navy ships and planes in search.

14 Sen. Joseph T. Robinson, leader of Roosevelt Court fight, dies at 64.

22 Senate defeats Court plan, burying it in committee by 70 to 20.

24 Alabama frees 5 of 9 Scottsboro defendants.

30 Tientsin set afire by Jap planes.

Aug. 1 Japs thrust south toward Nanking to widen "incident war"; Central China in panic.

12 Senator Hugo Black named to Supreme Court.

15 863 die as Chinese planes bomb Shanghai.

17 Black confirmed; Senate rejects rumors of Senator's Klan affiliations.

23 Japs land at Shanghai; 250 killed as shell explodes in international quarter.

Nov. 29 Britain and France agree to give Hitler colonies in exchange for peace.

Dec. 10 Japanese attack, sack Nanking.

11 Italy quits League over Ethiopia.

13 U. S. gunboat *Panay* sunk by Jap planes.

16 Tokyo apologizes for *Panay*, ousts air chief.

19 Russia executes 8 more officials for treason.

Erich von Ludendorff, last German war lord dies.

21 Roosevelt bars "isolation"; doesn't want 'peace at any price.'

25 U. S. accepts Tokyo apology on *Panay*.

DIED: Martin Johnson, Jan. 13; Jean Harlow, June 7; Sen. Jos. T. Robinson, July 14; Andrew Mellon, Aug. 26; Newton D. Baker, Dec. 25.

1938 The Stock Market sagged and slumped, industry was again in the doldrums. Roosevelt blamed a business recession. "Pump Priming" was the word in Washington, where they talked of fresh billions to get things moving again.

The President was working on a plan for an enlarged Navy. The program sounded logical, for in Europe the machinery of war gathered momentum ominously, while the democratic nations fumed and hesitated. Hitler's troops were poised for Austria; the stage was set for Munich.

Jan. 19 Franco air raids kill 700 in Barcelona and Valencia.

28 Roosevelt asks billion dollars for "two-ocean Navy."

Feb. 5 Hitler seizes army control; Ribbentrop becomes Foreign Minister.

16 Austria, yielding to Hitler's threat, puts Nazis in cabinet.

21 Hitler defies foes, says Nazis seek colonies, Pan-German unity. Anthony Eden resigns as British Foreign Minister, charging Chamberlain seeks to "buy peace."

22 Commons approves Chamberlain policy.

Mar. 4 Rev. Martin Niemoller imprisoned by Nazis.

8 Richard Whitney & Co. bankrupt, suspends; Whitney indicted for grand larceny.

12 Hitler strikes in Austria; Nazis seize government as army moves in.

18 Mexico expropriates foreign oil interests.

29 U. S. protests Mexican oil seizures.

April 4 Loyalist Spain severed as Rebels cut sea road.

11 Austrians vote 99.75 percent for Anschluss.

16 Britain and Italy sign pact to maintain peace.

May 2 Hitler in Rome, pledges amity with Duce.

9 League yields, allowing France and Britain to recognize Italy's conquest in Ethiopia.

June 15 Wage-Hour Bill enacted.

17 France votes universal conscription in wartime.

20 France closes frontier, halting aid to Loyalists.

23 Germany puts entire nation under forced labor.

July 4 50,000 jailed in Austria during 3½ months of Nazi terror.

9 14 Jews, 44 Arabs, dead in Palestine riots.

12 Howard Hughes flies around the world in 3 days, 19 hours, 14 minutes (record).

18 Douglas Corrigan lands in Ireland in "wrong-way" flight.

Aug. 1 Japanese and Russians in border skirmish.

3 Mexico rejects U. S. protest, cites U. S. New Deal to justify oil seizures.

11 Russian-Japanese truce.

Sept. 1 Hitler demands autonomy for Sudeten Germans.

5 Prague yields to Nazi pressure on nearly all German demands.

10 Hitler and Goering promise protection to Sudeten Germans.

16 Britain and France, after parley, urge Czechs to surrender Sudetenland.

26 Roosevelt appeals to Hitler and Czechs for peaceful settlement of problems.

30 Britain, France, Italy, Germany in parley at Munich agree to dismemberment of Czechoslovakia. Chamberlain returns to cheering London crowds with "peace in our time."

Oct. 1 Nazi troops cross Czech border; Czechs yield to Polish demand for Teschen.

3 Hitler makes triumphant entry in Sudetenland, and—

5 forces Britain and France to yield more Czech territory.

30 "Attack from Mars" in radio sketch by Orson Welles causes widespread panic.

Nov. 2 Hungary gets slice of Czechoslovakia, too.

10 Assassination of German envoy in Paris by Herschel Grynszpan looses Nazi wrath at Jews over all Reich; Jews herded into camps, fined \$400,000,000.

Mexico agrees to pay for oil and land seizures.

13 Mother Cabrini first American to be beatified in Vatican.

18 Hitler recalls German Ambassador from U. S. in protest against Roosevelt statement.

23 Jews in Germany fined 20 percent of all property.

Dec. 7 French, German peace pact signed.

DIED: Benj. N. Cardozo, July 9; Samuel Insull, 78, July 16; Cardinal Hayes, 70, Sept. 4.

1939 After Munich (Sept. 30, 1938) a murky twilight settled over the world; a time of uneasiness and fear. Britain armed feverishly, the U. S. stepped up plane production. The cause of the Spanish Loyalists disintegrated. Bundists, American Firsters and Communists grew hoarse denouncing warmongers. Congress stood firm for neutrality.

New York was excited about a World's Fair—the World of Tomorrow. While the assorted glamour and gadgets of this bright glimpse of the future were assembling on Flushing Meadow, a very different world was being shaped by forces unleashed in Europe. It was not the World of Tomorrow we expected. In its vast changes, economic and political upheavals, its waste and tumult and pain, it was to surpass the most extravagant forecasts.

Jan. 4 President Roosevelt calls for extensive defense program.

5 Felix Frankfurter named to Supreme Court.

7 Tom Mooney pardoned.

20 Hitler removes Hjalmar H. G. Schacht; appoints Walther Funk to head Reichsbank.

25 80,000 dead in Chilean earthquake; cities wrecked, destruction in 6 provinces.

26 Barcelona yields; Loyalists flee to North, Franco in pursuit.

30 Hitler pledges aid to Italy in war, calls for colonies, foreign trade, and denounces "defamation in U. S."

Feb. 10 Pope Pius XI dies at 81 after seventeen years' reign.

13 Justice Louis D. Brandeis retires at 82.

18 Golden Gate International Exposition opens in San Francisco.

20 Dorothy Thompson ejected by Bundists in tumultuous rally at New York's Madison Square Garden.

27 Franco officially recognized by France and England.

Sit-down strikes outlawed by Supreme Court.

Mar. 2 Eugenio Cardinal Pacelli elected Pope in third ballot; becomes Pius XII.

14 Hitler orders Slovakia to decide on complete break from Prague rule; Britain and France decline to interfere.

15 Hitler takes Czechs "under protection." Republic breaks up; Hungary and Rumania march in also.

16 Hungary annexes Carpatho-Ukraine.

22 Hitler and troops enter Memel, which is annexed to Reich.

23 James J. Hines, Tammany leader gets 4-8 years for Harlem lottery graft.

28 Last nine of fifty-two Spanish provincial capitals surrender to insurgents.

28 Madrid falls to Franco as Loyalists yield on all fronts.

31 Britain and France pledge aid if Poland resists Nazi attack.

April 1 U. S. accords Franco full recognition.

7 Thomas J. Pendergast indicted by U. S. on income tax evasion.

14 President Roosevelt vows to defend the United States' neighbors with arms and finances.

17 Italian troops invade Albania; King Zog flees.

27 House of Commons authorizes conscription in Great Britain.

28 Hitler scraps war renunciation treaty with Poland and naval limitations pact with England. Demands Danzig, and rebuffs Roosevelt's peace plea.

30 500,000 attend New York World's Fair on opening day.

May 3 Litvinov retires as commissar of foreign affairs, Molotov succeeds him.

5 Poland refuses to yield Danzig or Corridor.

7 Military and political alliance between Germany and Italy announced.

11 Fighting begins between Japanese and Soviet troops on border southeast of Lake Bor.

17 Canada welcomes King and Queen of England.

22 Germany and Italy sign ten-year military pact.

23 Squalus, United States submarine, sinks in 240 feet of water off Portsmouth.

June 1 Townsend old-age pension plan defeated in House.

5 Supreme Court voids Frank Hague's ban on the C. I. O.

8 President Roosevelt and King George pledge friendship at state dinner in Washington.

13 Heinrich Himmler sent to crush Czech unrest.

21 Lou Gehrig has rare form of infantile paralysis; can never play baseball again.

- July 16 Fritz Kuhn, U. S. No. 1 Nazi, arrested, called drunk and disorderly.
- 26 U. S. abrogates trade treaty with Japan.
- Aug. 2 President Roosevelt signs clean politics bill, the Hatch law.
- 10 Danzig told by Forster, Nazi leader, liberation is coming.
- 21 Hitler wins Russian non-aggression pact.
- 24 Roosevelt asks Hitler and Poland to avoid war.
- 25 Britain votes war powers to government; Roosevelt again urges negotiation plan on Hitler. Poland accepts, saying it will keep peace if Hitler will.
- 28 Hitler demands Danzig and all of Polish corridor; rejects "man-to-man" appeal by Daladier.
- 31 Hitler gets British note refusing to coerce Poles.
- Sept. 1 Hitler starts hostilities. Poland is invaded, Danzig annexed to Germany; cities are bombed.
- 2 Britain and France give Hitler ultimatum to suspend hostilities. Nazis sweep ahead, bomb Warsaw.
- 3 Great Britain declares war on Germany.
- 4 Liner *Athenia* torpedoed, sunk off Scotland; most of 1400 aboard saved. France joins England in declaring war on Germany.
- 7 First British Expeditionary Force lands in France.
- 17 Russia invades Poland to take huge border area.
- 18 Red and Nazi armies meet in Poland to map border.
- 19 Hitler says he wants peace; Allies spurn him.
- 21 Roosevelt urges Congress to repeal arms embargo, adopt cash and carry sales, ban credits, curb U. S. ships.
- 23 Warsaw surrenders.
- 29 Russia and Germany jointly warn Allies to end war, leave common border with no Poland. Allies scorn Russo-German peace bid.
- Oct. 2 U. S. recognizes Polish government in France. Safety belt of 300 miles around America is voted at hemisphere conference in Panama.
- 6 Hitler proposes general European conference for laying down arms, settlement of problems.
- 9 Roosevelt shuns volunteer peace role.
- 14 British battleship Royal Oak is sunk. 800 aboard lost.
- 17 Turkey rejects Soviet demands on Dardanelles, partition of Rumania.
- 18 U. S. closes its waters to belligerent submarines.
- 21 Allies plan to wage "waiting" war.
- 23 Earl Browder, U. S. Communist leader indicted for passport fraud.
- 25 Roosevelt and King Leopold tell Herald Tribune forum they mean to keep their countries out of war.
- 27 U. S. Senate approves "cash and carry" plan of limited aid to allies.
- Nov. 2 Embargo repeal is passed by Congress.
- 4 Roosevelt forbids U. S. ships to enter western European, Baltic or North Sea waters.
- 8 "Life With Father" opens at Empire Theater.
- 9 Hitler escapes time bomb in Munich beer hall; six killed.
- 23 Nazis use planes to mine British waters.
- 30 Russia attacks Finland from land, sea and air; bombs Helsinki.
- Dec. 2 Roosevelt denounces invasion of Finland as "wanton flouting of law."
- 5 Fritz Kuhn, Bund leader in U. S., gets 2½ to 5 years for forgery, grand larceny.
- 10 U. S. lends Finland \$10,000,000 as she calls on world to help her beat off Red invader.
- 11 League of Nations calls on Russia to halt Finnish war in 24 hours.
- 12 Russia rejects League's demand, declaring she is not at war with Finland.
- 17 *Graf Spee* scuttled off Montevideo by Hitler order after fleeing British warships.
- 19 Nazi liner *Columbus* scuttled to escape capture.
- 23 Roosevelt names Myron C. Taylor as peace envoy to Pope Pius XII.
- 28 Pope Pius XII returns King Victor Emmanuel's visit to the Vatican; first papal visit to Quirinal in more than seventy years.
- 29 Harry Bridges, west coast labor leader, ruled not a Communist.
- DIED:** Jacob Ruppert, 71, Jan. 13; Pius XI, 81, Feb. 10; Ralph Pulitzer, June 14; Claude Swanson, July 7; Lawrence Gilman, 61, Sept. 9; Cardinal Mundelein, Oct. 2; Pierce Butler, 73, Nov. 16.

1940 After the blitz in Poland—stalemate, boredom. It seemed a phony war. The French army moped behind the Maginot Line; German work gangs poured concrete along the Westwall. In London the war correspondents in their new uniforms talked it over like critics at a play; found it dull.

In the U. S. they were playing the "Star-Spangled Banner" in the theaters ("Life With Father" had just opened) and people grew misty-eyed when Kate Smith sang "God Bless America!" Wendell L. Willkie was about to write a short piece on national affairs called "We, the People." A new force was rising to challenge U. S. complacency, disturb the apathy of the American people.

Jan. 3 F.D.R. asks wartime powers, urges higher taxes for defense.

12 Navy's 5-year program calls for 150 ships costing \$2,500,000,000.

15 F. B. I. seizes eighteen persons in fantastic plot to seize the government.

19 Senator William E. Borah of Idaho, dies.

22 Earl Browder gets 4 years for passport fraud.

Feb. 15 J. P. Morgan & Co. abandons private banking; becomes public corporation.

17 British raid Nazi prison ship, free 300 in Norwegian fjord.

Mar. 2 Russians, fighting Finland, crack Mannerheim line, take Viipuri.

7 *Queen Elizabeth*, world's largest ship comes to New York for safety from Nazi raids.

10 News U. S. would release 400 mile-an-hour planes to Allies causes furore in Congress.

12 Soviet-Finnish peace terms give Karelian Isthmus, Viipuri to Russia.

17 Murder Inc., ring of commercialized killers, uncovered in Brooklyn.

20 Edouard Daladier out, Paul Reynaud forms new French cabinet to prosecute war to the limit.

22 Army announces B-19 (Flying Fortress).

25 Sumner Welles returns from European "Peace Mission"—reports failure to White House.

April 7 Eclipse of the sun.

9 Nazis invade Denmark and Norway.

15 British land in Norway to combat invader. (Too late; no air cover.)

24 Nazi air attacks rout British in Norway.

May 9 Nazis invade Holland, Belgium.

10 Chamberlain resigns, Churchill takes over as Prime Minister.

11 New York World's Fair reopens at Flushing Meadow.

13 Churchill in historic address tells Britain the war means blood, sweat, tears.

15 Holland surrenders.

16 Roosevelt asks billion for defense, 50,000 airplanes.

22 F.D.R. confers with Landon on "coalition"; Landon refuses unless F.D.R. gives up third term.

27 Belgium surrenders.

28 Dunkerque evacuation of British begins.

June 3 Three-fourths of British army rescued from Dunkerque beaches; tanks, matériel lost.

10 Italy declares war, invades France.

13 Germans enter Paris (undefended).

18 F.D.R. asks two-ocean Navy.

PM, new style newspaper, without advertisements, launched in New York by Marshall Field.

19 Stimson and Knox, Republicans, named to War and Navy posts.

21 France gets armistice; Nazis occupy northwest portion and coastal region.

27 Wendell Willkie nominated by Republicans at Philadelphia; McNary for Vice President.

July 1 M. L. Annenberg, Philadelphia publisher, gets 3 years for \$1,200,000 tax evasion.

U. S. orders 45 new warships.

4 Time bomb planted at British Pavilion at New York World's Fair, kills two policemen.

7 Still no word from Sir Arthur Conan Doyle.

12 Britain and Russia sign 20-year mutual aid pact.

14 Russia annexes Estonia, Latvia, Lithuania.

17 F.D.R. nominated for third term at Chicago; Henry Wallace for Vice President.

Aug. 1 Gerhard A. Westrick, Nazi super-agent discovered carrying on activities from home in Westchester.

6 Mayor Houde of Montreal interned for urging resistance to conscription.

- Italians begin drive into Egypt, threatening Suez, Alexandria, British life line.
- 8 Luftwaffe launches all-out attack on England.
- 13 U. S. recalls consuls from Latvia, Lithuania, Estonia.
- 16 Nelson Rockefeller appointed co-ordinator of Latin-American affairs.
- 17 Willkie, accepting Republican nomination at Elwood, Ind., challenges Roosevelt to debate, upholds draft.
- 18 U. S. and Canada announce joint defense plan.
- 20 U. S.-British deal gives America sea-air bases in exchange for 50 overage destroyers.
- 21 Leon Trotsky dies in Mexico City of wounds inflicted by political agent "Frank Jackson."
English children arrive in the United States, seeking safety from the Nazi air attacks on England.
- 25 Harry Hopkins, ill, resigns as Secretary of Commerce; Jesse Jones succeeds him.
- 31 Rumania demobilizes, prepares for Nazi occupation.
Senator Ernest Lundeen and 24 others die in airplane crash.
- Sept.** 4 King Carol yields Rumanian rule to Antonescu.
7 House passes Selective Service Bill, 263-149.
Under Nazi pressure, Vichy Government arrests Gen. Maurice Gamelin, Paul Reynaud, Edouard Daladier.
- 12 Forty-three persons killed in powder plant explosion at Kenvil, N. J.
- 6 London ablaze after worst incendiary raid.
- 15 Luftwaffe forced by heavy losses to switch to night bombing.
Willkie opens campaign; his voice gives out after 2-day blast against F.D.R. and New Deal.
- 16 Roosevelt signs draft law.
- 24 Dakar beats off British-French sea attack; thwarts De Gaulle's invasion attempt.
- 27 Germany, Italy, Japan sign 10-year military pact.
- Oct.** 4 Hitler and Mussolini meet at Brenner Pass.
H. G. Wells says U. S. should keep out of the war; our party politics would mess up the peace.
Pope Pius calls on women of the world to reject immodest fashions.
- 7 Reichswehr occupies Rumania.
- 16 U. S. registers 16,500,000 for selective service.
- 23 Hitler and Franco meet at Hendaye.
- 26 Hitler and Pétain pledge collaboration.
- 27 Italy invades Greece.
- 28 45,008,385 (paid) saw New York World's Fair.
- Nov.** 6 Roosevelt reelected, wins 38 states to Willkie's 10; Democrats keep Congress.
7 Third largest suspension bridge collapses in high wind at Tacoma, Wash.
8 Hitler says U. S. aid cannot save Britain.
- 10 Neville Chamberlain, British Prime Minister at start of war, dies at 71.
- 11 Viacheslav M. Molotov at Berlin (first time he ever left Russia); holds two-day talk on Soviet's place in "New Order."
British air attack smashes Italian fleet at Taranto.
- 15 Nazis bomb Coventry; leave 1,000 dead, historic city in ruins.
Strike at Downey, Cal. Vultee plant ties up \$50,000,000 plane production (12 days).
- 17 Italians driven off Greek soil.
- 18 John L. Lewis quits as C. I. O. head, following pledge to resign if Roosevelt was reelected.
- 20 Hungary joins Axis.
- Dec.** 7 Joseph P. Kennedy resigns as Ambassador to England.
9 Gen. Sir Archibald Wavell launches counterattack in Egypt.
- 14 The Sixth Avenue branch of New York's Independent Subway system opens.
- 29 F.D.R. announces lend-lease; calls for full war aid to Britain; U. S. "Arsenal of Democracy."
- DIED:** Senator William E. Borah, 74, Jan. 19; E. S. Harkness, 66, Jan. 29; Lord Tweedsmuir (John Buchan), Feb. 11; Raymond Ingersoll, 64, Feb. 24; Samuel Untermyer, 81, Mar. 16; Mrs. W. K. Vanderbilt, 76, April 20; Walter P. Chrysler, 65, Aug. 18; Leon Trotsky, August 21; Sen. Ernest Lundeen, Aug. 31; Giulio Gatti-Casazza, 71, Sept. 2; Speaker William B. Bankhead, 66, Sept. 15; Dr. Glenn Frank, 52, Sept. 15; Tom Mix, 60, Oct. 12; Neville Chamberlain, 71, Nov. 10; Sen. Key Pitman, 68, Nov. 10; Lord Lothian, 58, Dec. 12.

1941 This was the winter of the long blitz. The Luftwaffe rained bombs methodically on England. The Nazi war machine had rolled through the Balkans and was pushing across the rim of North Africa toward Suez, threatening the British life line. Lend-lease was about to begin, over the bitter protests of isolationists. Already plants were expanding. The cry was for machine tools, aluminum, mechanics. While Selective Service took the youngsters, the able-bodied, the unmarried, industry's demands started a feverish migration from farms and towns to San Diego, Hartford, Paterson, Seattle, Kansas City, Detroit, Bridgeport. The "Arsenal of Democracy" was beginning its gigantic task. The training of the first raw conscripts had started. In newly staked-out Army camps thousands of wooden barracks and mess halls rose to the clatter of hammer and saw.

- Jan.** 1 ASCAP strike bars most U. S. music from air.
 Britain mobilizes to combat fire bombs.
 5 British take 25,000 Italian prisoners in North Africa.
 7 William S. Knudsen and Sidney Hillman named U. S. defense production heads with equal powers.
 8 Admiral Husband E. Kimmel named to command U. S. Fleet.
 19 Hitler and Mussolini meet in Germany, agree to greater Nazi participation in Mediterranean area.
 22 British take Tobruk.
 24 Three-day revolt of Iron Guard quelled after 6,000 are killed in Rumania.
 27 Willkie and Churchill confer.
- Feb.** 10 Britain breaks with Rumania.
 11 Nazis start flying troops into Balkans.
 26 Britain wins all Somaliland in East Africa.
- Mar.** 1 Bulgaria joins Axis; Nazi troops move in.
 11 F.D.R. signs Lend-Lease bill.
 15 British rush army to Greece as Nazis move into Balkans.
 25 Yugoslavs sign with Axis, touching off riots and revolt. Government flees.
 30 U. S. seizes 65 Axis ships in harbors here.
- April** 1 C. I. O. calls Ford strike; soft coal strike begins.
 6 Germany marches on Yugoslavia and Greece.

- 8 Yugoslav line breaks before mechanized invasion.
 13 Belgrade falls; demoralized Yugoslavs take to the hills.
 Axis columns push eastward against weakened British lines.
 Russia, Japan sign neutrality pact.
 17 Yugoslavs surrender: Gen. Draza Mihajlovic continues guerrilla warfare.
 26 Nazi tanks roll into Athens as remnants of British army quit Greece.
 29 Lindbergh, called "Copperhead" by F.D.R., gives up Army Reserve commission.
- May** 6 Stalin takes Soviet premiership from Molotov.
 10 Rudolf Hess, Nazi Deputy Fuehrer, lands in Scotland by plane.
 10 Strike ties up \$500,000,000 ship contracts in West Coast yards.
 15 U. S. seizes *Normandie*, twelve more Vichy ships.
 19 Italian forces in Ethiopia surrender to British.
 La Guardia named director of Office of Civilian Defense.
 20 Nazis launch airborne attack on Crete.
 25 H. M. S. *Hood*, biggest British warship, sunk by Nazi battleship *Bismarck*.
 27 *Bismarck* sunk by British naval air attack.
 Roosevelt proclaims unlimited emergency.
- June** 1 Crete overrun by Nazis.
 2 Hitler and Mussolini meet at Brenner Pass.
 4 Ex-Kaiser Wilhelm of Germany dies.
 10 British and Free French capture Damascus.
 12 Harlan Fiske Stone to succeed Charles E. Hughes as Chief Justice; Jackson, Byrnes named to Supreme Court.
 18 Turkey signs amity pact with Germany.
 20 Ford signs with C. I. O.
 22 Hitler launches attack on Russia.
- July** 5 Nazis reach the Dnieper.
 7 U. S. occupies Iceland bases.
 12 Nazis break "Stalin Line," fan out toward Kiev, Moscow, Leningrad.
 13 Britain and Russia sign war pact, bar separate peace.

- 19 British broadcast calls for "V for Victory" campaign—launching famous symbol.
- 21 Jap fleet off Indo-China.
- 24 U. S. denounces Japan as aggressor, freezes assets, cuts off oil, bars silk.
- 26 Jap forces at Saigon, French Indo-China.
- Aug. 12 Pétain summons France to full support of Hitler, backs war against Russia.
House extends military service for year and a half by a single vote, 203 to 202.
- 14 F.D.R. and Churchill meet at sea off Canada, announce agreement on war aims, future hopes in historic "Atlantic Charter".
- 20 Soviet blows up Dneiper dam as Nazis sweep across Ukraine.
- 22 Nazis reach outskirts of Leningrad.
- 27 Laval wounded at review of French troops raised to fight Russia.
- 28 Iran yields to British-Soviet troops; agrees to protective occupation.
- 31 F.D.R. warns peril to nation greater than in 1939.
- Sept. 4 U. S. destroyer *Greer*, attacked by Nazi sub, fights back.
- 8 Leningrad encircled by Nazis, siege begins.
- 13 Mrs. Eleanor Roosevelt named assistant director of Office of Civilian Defense.
- 19 Nazis take Kiev and Poltava.
- Oct. 3 Hitler announces Russia is defeated and "will never rise again."
- 8 Nazis take Orel in drive toward Moscow.
- 16 Jap cabinet falls in crisis; Tojo, Army firebrand, new Premier.
House votes to arm American merchant ships.
- 17 U. S. destroyer *Kearny* torpedoed off Iceland; 11 lost.
- 31 U-Boat sinks U. S. destroyer *Reuben James* with loss of 100 off Ireland.
- Nov. 3 Nazis overrun Crimea, head for Sevastopol.
Maxim M. Litvinoff named Russian Ambassador to U. S.
- 12 Russians halt Nazis at gates of Moscow.
- 13 House votes neutrality act revision.
- 15 Saburo Kurusu, special Jap envoy, arrives at Washington.
- 17 Kurusu confers with President Roosevelt.
- 19 British open powerful offensive in Libya as aid to Russians.
- 23 Nazis take Rostov.
- 26 Hull presents final terms to Jap envoys.
- 27 U. S.-Jap parleys near breakdown; Roosevelt bars compromise.
- Dec. 1 U. S.-Japanese tension rises as F.D.R. sees Navy chief. Japan moving troops in Indo-China; British fleet reaches Singapore.
- 6 F.D.R. sends appeal to Hirohito, urging peace.
- 7 Japan attacks Pearl Harbor, Philippines, Guam, forcing U. S. into war; Pacific Fleet crippled.
- 8 Congress votes war, 470-1; Britain declares war on Japan.
Berlin announces drive on Moscow is off for the winter.
- 10 Japs land on northern Luzon in the Philippines.
- 11 German declaration of war on U. S. brings quick response from Congress.
- 13 Japs seize Guam, attack Midway, Wake.
- 14 Japs attack Hong Kong.
- 16 Justice Owen Roberts heads Pearl Harbor inquiry.
- 17 Chester Nimitz ousts Kimmel as head of Pacific Fleet.
- 19 MacArthur made full general; Admiral King given top command of U. S. naval forces.
- 21 Hitler ousts Field Marshal Walther Von Brauchitsch, takes supreme army command with rank of Field Marshal.
- 22 Churchill at White House for war parleys.
- 25 Hong Kong falls.
- 27 Japs bomb Manila.
- 28 Japs invade Sumatra.
- DIED: Amy Mollison, 32, Jan. 6; Kenneth F. Simpson, Jan. 24; Gen. John Metaxas, 69, Jan. 29; Sir Frederick K. G. Banting, Feb. 23; Former King Alfonso, Feb. 28; Lawrence Hills, Mar. 28; Virginia Woolf, April 2; August Hecksher, 92, April 26; Lou Gehrig, 37, June 2; Arthur Curtiss James, 74, June 4; Ex-Kaiser, Wilhelm, June 4; Senator Pat Harrison, 59, June 22; Ignace Jan Paderewski, 80, June 29; Mrs. James Roosevelt, 86, Sept. 6; Louis D. Brandeis, 84, Oct. 5; Simon Guggenheim, 73, Nov. 2.

1942 Those little Japanese, they must be crazy! So we mumbled and fumed that Sunday afternoon. They were crazy, but they had sunk half our fleet (except the carriers), crippled a great naval base, reduced our Pacific sea power dangerously. They had driven us to panic, then into rage and confusion. We shook that off. We were in it now, up to our ears. The confusion cleared. The carping clamor of the isolationists died out—to be followed almost immediately by a shrill Communist clamor for a second front.

Russia was in desperate straits that winter. The war tempo came to America. Blackouts, air-raid wardens, civilian defense, censorship, draft boards, ration books, Knudsen-Hillman. No more automobiles. Already our planes were streaming onto English airfields; shiploads of trucks and tanks were unloading on the Persian Gulf for transit to Russia. We were in Iceland, Bermuda, on the shoulder of South America. We were in it—for keeps.

- Jan. 2 MacArthur gives up Manila; fights on for Bataan, Corregidor.
- 13 Donald Nelson made war production chief.
- 16 Carole Lombard killed in plane crash during cross-country tour for Victory Loan drive.
- 28 U. S. troops land in North Ireland.
- Feb. 2 *Normandie* capsizes after fire at N. Y. pier; sabotage theory rejected by Naval officers.
- 23 Jap submarine shells California coast.
- Mar. 1 Japs invade Java.
- 9 They land on New Guinea at Salamaua and Lae.
- 17 MacArthur leaves Philippines and arrives in Australia; promises to reorganize Pacific forces.
- 29 Britain offers India dominion status after war with right to quit Empire. Indian leaders reject it.
- April 15 Laval becomes Premier of France.
- 18 Tokyo and Yokohama bombed by U. S. planes from carrier *Hornet*.
- May 9 Jap fleet defeated with heavy loss in Battle of Coral Sea, carrier plane action.
- 15 Nation-wide gas rationing starts; uncongested highways a strange sight.
- June 1 1250 R. A. F. planes smash Cologne in war's mightiest raid.
- 7 U. S. Pacific Fleet stops Jap sea-power in crucial 3-day battle of Midway.

- 10 Lidice razed, all males put to death in Nazi terror following Heydrick assassination; U. S. towns asked to rename towns after Czech village.
- 27 Axis columns 100 miles in Egypt.
- July 2-6 Rommel's Afrika Korps halted at El Alamein.
- 21 Leahy named F.D.R.'s chief of staff.
- 23 Hull says war aims include international agency for peace.
- Aug. 10 U. S. Marines land in Solomons, seize Tulagi and Guadalcanal, first stop on road to Tokyo.
- Sept. 12 Russians halt Nazis at Stalingrad; more than 1 million engaged in crucial siege.
- Oct. 3 F.D.R. orders price and rent stabilization; names Byrnes director to control living costs.
- 23 Montgomery routs Rommel's tank corps at El Alamein; saves Suez.
- Nov. 3 Dewey elected N. Y. Governor by 650,000, defeating John J. Bennett Jr.
- 7 U. S. and England land great army in French Africa; largest invasion operation in history.
- 11 Nazis begin occupation of all France.
- 14 Edward Rickenbacker and companions rescued after 24 days adrift in Pacific after plane crash.
- 15 U. S. smashes Jap armada in Solomons.
- 18 Pétain makes Laval dictator of France.
- 27 French scuttle fleet at Toulon to save it from Nazi seizure.
- 29 433 dead in Boston night club fire at Cocoanut Grove.
- Dec. 1 Beveridge submits cradle-to-grave security plan to end want and worry in Britain.
- Dec. 7 Pearl Harbor anniversary observed throughout U. S. with solemn pledges for victory.
- 14 MacArthur takes Buna, New Guinea.
- 19 British invade Burma.
- 25 Darlan, French turncoat and civilian administrator in Africa, assassinated.
- 27 Soviet drive toward Rostov cuts off 22 Nazi divisions behind Stalingrad; Russians off on road to Berlin.

DIED: Carole Lombard, Jan. 16; Brig. Gen. Cornelius Vanderbilt, 68, March 1; John Barrymore, 60, May 29.

1943 The war maps showed a U. S. Army pushing the Nazis back in Tunisia; Rommel's Afrika Korps streaming through Tripoli in retreat. American men, tanks and planes were in action at last.

MacArthur had stopped the Japs on New Guinea, was building a base in Australia. Our Navy had rallied in the Pacific and was getting ready to take the offensive. At home the shrill outcry for a second front mingled with the drive to sell war bonds, scrap metal drives. Beneath these surface excitations was the steady roar of machinery, the surge and thunder of blast furnaces and rolling mills. The blueprint stage was past. We were making the stuff.

Eighteen miles northwest of Knoxville that winter, woodsmen were clearing a Tennessee hillside. A building operation was about to begin, Manhattan Project, at Oak Ridge, something connected with science, and the war.

Jan. 11 F. D. R. calls for \$100 billions for war.

18 Russians break 17-month Lenin-grad siege.

24 President Roosevelt and Churchill in 10-day meeting at Casablanca agree on unconditional surrender goal.

27 First all-U. S. air raids over Reich.

Feb. 11 Dwight D. Eisenhower, a full general, to command Allied armies in Europe.

16 Russians take Kharkov.

Mar. 2-4 Japs lose 10 warships, 12 transports as Allied planes smash convoy in battle of Bismarck Sea.

24 British crash Mareth Line in Tunisia.

April 7 Gen. George S. Patton's U. S. forces join British Eighth Army in attack on Afrika Korps.

9 President curbs prices, pay, job changing.

19 Reports tell of Nazi annihilation of 2,000,000 European Jews by gas chamber, mass execution.

May 4 A. E. F. takes Bizerte; British seize Tunis as African campaign reaches mop-up stage.

12 Remnants of Nazis trapped on Cape Bon.

14 Americans land on Attu, in Aleutians.

22 Moscow ends Third International.

June 2 Leslie Howard lost in passenger plane shot down by Nazis.

4 House votes drastic anti-strike bill.

22 Army quells Detroit race riots; 23 dead.

July 1 MacArthur makes four new landings, New Guinea, Trobriand, Rendova, New Georgia.

10 Allies invade Sicily.

25 Mussolini deposed, King and Pietro Badoglio rule Italy.

Aug. 17 Sicily conquest complete.

22 Russians replace Litvinoff as U. S. Ambassador with Andrei Gromyko.

Sept. 3 British Eighth Army lands in Italy, crossing Straits of Messina; Mark Clark's Fifth invades at Salerno.

6 MacArthur lands at Lae.

75 dead as Congressional Limited is wrecked in Philadelphia.

9 Italy's unconditional surrender announced; U. S. forces land at Naples.

10 Nazis seize Rome.

25 Edward Stettinius, Jr., named to replace Sumner Welles as Hull's chief aid.

Oct. 13 Italy declares war on Germany.

Nov. 1 Moscow pact pledges three-power unity to win war and world organization to maintain peace; democratic Italy and free Austria envisioned.

5 Senate by 85 to 5 votes for a world organization in accordance with Moscow pact.

7 Russians retake Kiev.

21 Marines land at Tarawa and other Gilbert islets.

26 Russians retake Gomel.

27 Bremen bombed by biggest U. S. force—500 planes.

30 President Roosevelt, Churchill, Chiang meet at Cairo; pledge defeat of Japan, free Korea.

Dec. 3 Roosevelt, Churchill and Stalin meet at Teheran, agree on invasion plans.

24 Eisenhower named to command invasion.

26 Nazi pocket battleship *Scharnhorst* sunk by British off northern Norway.

U. S. seizes railroads to bar strike. Marines land on Cape Gloucester, New Britain.

DIED: George Washington Carver, Jan. 5; Carlo Tresca, Jan. 11; Alexander Woollcott, Jan. 28; J. P. Morgan, 75, March 13; Leslie Howard, June 2; Mrs. William Brown Meloney, June 23.

1944 Through the big staging depots behind the seaport cities endless streams of men moved toward the docks. Trainloads, busloads; sunburned, hardened soldiers loaded with gear, men of college age, weaned from family and home; tough, casual young Americans on their way to war.

Railway stations and bus terminals eddied with hurrying, uniformed figures. Broadway and Main Street were overrun. War had reached concert pitch. England bulged with uniformed men, fighter and bomber pilots, tanks, trucks, matériel. Ships in great sprawling convoys were moving across the Atlantic; tankers, troopships, supply ships, ammunition ships, LST's, LCI's, assembling around the rim of the British Isles for D-Day.

In the Pacific, Task Force 58 with its new fast Essex class carriers was ranging from the Solomons to the Gilberts and Marshalls. The Navy was about to begin its swift relentless conquest of the Pacific stepping stones to Japan.

- Jan. 4 Russian army over Polish line.
- 11 F.D.R. calls for a national service law to prevent strikes.
- 18 Army returns railroads to their owners as strike threat is removed.
- 22 Allied troops land behind German lines at Anzio near Rome.
- Feb. 1 Marines and Army troops land on Kwajalein Atoll in the Marshalls.
- 15 The Abbey of Monte Cassino bombed by Allied planes.
- Mar. 1 American troops land on Admiralty Islands in the Pacific.
- 4 U. S. planes attack Berlin for the first time.
- 10 General Edelmiro J. Farrell takes over as President of Argentina.
- 19 Russians reach Rumanian border.
- April 5 Wendell L. Willkie withdraws from Presidential race.
- 11 Russians retake Odessa.
- 26 U. S. Army seizes Montgomery Ward and Company in Chicago as a result of a strike.
- May 10 Russians retake Sevastopol.
- 18 Germans evacuate Cassino.
- June 4 Rome falls to the Allies.
- 6 American, British and Canadian forces land in France, D-Day.
- 11 Russians open drive against Finland.
- 15 New B-29 Superfortresses bomb Japan for the first time.
- 25 Cherbourg falls to the Allies.
- 28 Governor Thomas E. Dewey of New York is nominated for President.

- July 4 Minsk, last great Russian city held by Nazis, taken by Russians.
- 6 152 die, 250 are hurt in Hartford, Conn., circus fire.
- 9 Saipan conquest is complete.
- 20 Hitler wounded in bomb plot.
- 21 F.D.R. and Harry Truman nominated for Pres. and V. P.
- American forces land on Guam.
- Aug. 2 Turkey breaks off diplomatic relations with Germany.
- 15 Allies land in south France.
- 24 Paris freed by U. S. and French troops; Marseilles, Grenoble fall.
- Sept. 4 Antwerp, Brussels fall to Allies.
- Finns quit war with Russia, ask Germans to leave the country.
- 12 Americans enter Germany.
- 14 Marine 1st Division lands in Palau.
- 17 Allied air-borne army lands in Holland.
- 24 Czechoslovakia and Hungary are invaded by Red army.
- Oct. 4 American forces break through the German Westwall.
- 20 U. S. troops invade the Philippines.
- Aachen falls to the Americans after nineteen days.
- Nov. 7 President Roosevelt reelected for a fourth term.
- 16 Allies launch general offensive on 300-mile front.
- 25 Cordell Hull resigns as Secretary of State.
- 27 Edward Stettinius Jr., named Secretary of State.
- Dec. 16 Americans land on Mindoro, 150 miles from Manila.
- 16 German counteroffensive is launched in Belgium.
- 24 Americans halt the Nazis on the ninth day with help of 7,000-plane raid.
- 25 Nazis move forward again.
- 27 The Germans are stopped again.

DIED: Count Galeazzo Ciano, Jan. 11; William T. Dewart, 68, Jan. 27; William Allen White, 75, Jan. 29; Sen. Charles L. McNary, Feb. 25; Irvin S. Cobb, 67, March 10; William Cardinal O'Connell, 84, April 22; Frank Knox, 70, April 28; Norman H. Davis, July 2; Lt. Gen. Leslie J. McNair, July 27; Manuel Quezon, Aug. 1; Al Smith, Oct. 5; Wendell L. Willkie, 52, Oct. 7; Archbishop of Canterbury, 63, Oct. 26; Charles Dana Gibson, 77, Dec. 23.

1945 It was mostly downhill now. The great American war potential had delivered the goods. America's industrial strength, translated into tanks, trucks, planes, jeeps, was closing in on Germany. The Battle of the Bulge was the Nazis' last desperate stroke and it didn't quite come off. Along the Pacific seaboard, Navy convoys were loading for Iwo and Okinawa. From newly captured Saipan and Tinian B-29's were pounding Japan's industrial centers to rubble. The war had come to its last decisive phase. Here at home the nation churned with ultimate activity. Everyone had a job, everyone had money. Hotels, night clubs, theaters, roadhouses, juke joints reflected the tension and hysteria. Victory was in the air.

- Jan.** 9 General Douglas MacArthur lands invasion force in Lingayen Gulf, Luzon, wins 15-mile beachhead.
12 German line crumbles, Allies regain 100 square miles in "Bulge."
17 Russians take Warsaw by encirclement.
21 Jesse Jones out of Cabinet to make way for Henry Wallace as Secretary of Commerce.
24 Russians cross the Oder. Yankees sold to McPhail-Topping syndicate for \$3,000,000.
31 U. S. Rangers rescue 513 from Jap prison camp in daring Luzon raid.
- Feb.** 3 U. S. Army breaches Westwall; drives last Nazis from Belgium. U. S. troops enter Manila.
5 Trapped Japs fire Manila, business area in flaming ruins. Third Army smashes through Siegfried Line.
7 Russians reach outer defenses of Berlin.
12 Big Three at Yalta agree to disarm Germany forever.
13 Russians take Budapest after 49-day siege.
19 U. S. Marines land on Iwo Jima.
23 Marines take Suribachi, raise flag.
24 Egyptian Premier assassinated after Egypt declares war on Axis.
- Mar.** 2 U. S. Ninth Army reaches Rhine at Dusseldorf.
7 Lt. Gen. Courtney H. Hodges, First Army crosses Rhine on Remagen bridge.
10 B-29s begin incendiary raids on Japan, set great fires in Tokyo.
17 Iwo Jima, toughest Pacific Island, falls to U. S. after 26-day assault.

22 Field Marshal Albert Kesselring takes Nazi command in West, replacing Field Marshal Karl R. G. von Rundstedt.

23 Patton's Third Army crosses the Rhine.

30 Russians take Danzig.

April 1 U. S. Tenth Army invades Okinawa.

5 Japanese Cabinet falls.

11 Ninth Army reaches the Elbe in 50-mile surge; Russians drive past Vienna.

12 President Roosevelt dies of cerebral hemorrhage at Warm Springs, Ga., at 3:35 P. M. Harry S. Truman sworn in to succeed him.

13 Russians take Vienna, seize 120,000 Nazis.

16 Truman, taking office, pledges unconditional surrender, international organization for peace as his goals.

18 Ernie Pyle killed on Ie Shima.

20 Seventh Army takes Nuremberg.

21 Russians edge into Berlin.

23 Nicholas Murray Butler retires after 44 years as president of Columbia University.

25 United Nations parley opens at San Francisco.

26 Bremen falls to British; Henri Philippe Petain surrenders to Allies.

27 Americans and Russians meet on the Elbe.

28 Benito Mussolini and mistress Clara Petacci killed at Lake Como; (29) bodies exhibited in streets of Milan.

30 Russian flag raised over Reichstag.

May 1 Grand Admiral Karl Doenitz takes command in Germany.

2 Berlin falls.

4 Nazis give up Denmark, Holland, North Germany.

7 Germany surrenders unconditionally at 2:41 A. M. (French Time).

11 Kamikaze attacks on U. S. carrier *Bunker Hill* kills 373 off Okinawa.

23 Truman in postwar cabinet shift replaces Attorney Gen. Francis Biddle with Tom C. Clark, Secretary of Agriculture Claude E. Wickard with Clinton P. Anderson, Frances Perkins, Secretary of Labor, with Lewis B. Schwellenbach.

Churchill dissolves British war cabinet; forms Conservative body to serve until election.

- Admiral Doenitz and aides seized. Heinrich Himmler commits suicide by poison.
- 26 Vast Tokyo area—18.6 square miles—burned out by double raid of B-29s.
- June 6 Gov. Thomas E. Dewey names anti-discrimination board to combat racial and religious discrimination in employment.
- 15 Joachim von Ribbentrop, Nazi foreign minister, seized in Hamburg.
- 22 Okinawa won by U. S. Tenth Army.
- 26 United Nations Charter signed at San Francisco.
Edward R. Stettinius, Jr. resigns as Secretary of State to become U. S. delegate to United Nations.
- July 1 Newspaper deliveries in N. Y. halted by strike.
- 2 James F. Byrnes named Secretary of State.
- 13 U. S. surface fleet begins bombardment of Japan.
- 15 Lights in Britain shine at night for first time since Sept. 3, 1939.
- 17 Truman, Churchill, Stalin meet at Potsdam for final war conference.
- 21 U. S. serves Japan with unconditional surrender ultimatum on Potsdam terms.
- 26 Churchill out, Attlee in as British election returns show overwhelming sweep for Labor.
Attlee replaces Churchill at Potsdam conference.
- 28 Army bomber crashes into Empire State Building in fog; 13 killed, 26 hurt.
- Aug. 2 Potsdam parley agrees on future of Germany; reparations, peace preliminaries.
- 5 Hiroshima blasted by atomic bomb, dropped by U. S. Army Air Force. (Trial bomb tested in New Mexico, July 16.)
- 8 Russia declares war on Japan.
- 9 Nagasaki hit by second atom bomb attack.
- 10 Japan submits surrender offer; asks Emperor retain sovereignty.
- 14 Japan accepts surrender terms. War ends. MacArthur to direct occupation.
- 16 Pétain guilty of treason; death sentence commuted to life imprisonment by Provisional President Charles de Gaulle.
- 27 U. S. Third Fleet enters Japanese waters.
- 30 MacArthur lands in Japan.
- Sept. 2 Japanese sign surrender aboard battleship *Missouri* in Tokyo Bay. V-J Day.
Stalin in victory broadcast claims Kuriles and Sakhalin for Russia.
- 11 Gen. Hideki Tojo, wartime premier, shoots himself in futile suicide attempt.
- 14 Ford production halts; 50,000 made idle by wave of suppliers' strikes.
- 18 Robert P. Patterson, Under Secretary, succeeds Henry L. Stimson as Secretary of War.
- Oct. 3 Truman suggests world ban atom bomb in war; asks federal control on atomic development in U. S.
- 9 Pierre Laval sentenced to die as traitor.
- 18 Twenty-four Nazi ringleaders indicted as war criminals.
- 23 President Truman calls for universal military training for U. S. youth in peacetime.
- 30 Getulio Vargas resigns as President of Brazil after 15-year regime.
- Nov. 6 O'Dwyer elected Mayor of N. Y.; Tammany back after 12 years.
- 15 Truman, Attlee, King decide in Washington conference that atom bomb secrets will not be shared until United Nations devise firm control plan.
- 20 General Motors strike called 200,000 out.
- Dec. 12 Truman names fact-finding board in General Motors strike.
- 15 Prince Fumimaro Konoye, three times premier of Japan, commits suicide rather than face trial.
- 16 Truman names Secretary Byrnes, Stettinius, Senator Tom Connally, and Mrs. Eleanor Roosevelt delegates to the United Nations.
- 21 Gen. George S. Patton, Jr. dies of injuries in motor accident.
Archbishop Francis J. Spellman, three others in U. S. among 32 named Cardinals by Pope.
- 27 Big Three agree on Atomic Energy Commission for United Nations.
- DIED: Thomas J. Pendergast, 72, Jan. 26; David Lloyd George, 82, March 26; Sen. Hiram W. Johnson, Aug. 5; Admiral John S. McCain, 61, Sept. 5; Judge Irving Lehman, 69, Sept. 21; Jerome Kern, 60, Nov. 11.

WHO'S WHO



LEADERS IN ART, ENTERTAINMENT,
SPORTS, GOVERNMENT AND POLITICS,
LITERATURE, SCIENCE



LEADING ASSOCIATIONS
AND AGENCIES



FORMS OF ADDRESS



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WHO'S WHO IN ART

- ALBRIGHT, Ivan Le Lorraine, b. Chicago, Ill., Feb. 20, 1897.
- ALBRIGHT, Malvin Marr, b. Chicago, Ill., Feb. 20, 1897.
- ARCHIPENKO, Aleksandr P., b. Kiev, Russia, May 24, 1887.
- BENTON, Thomas Hart, b. Neosho, Mo., Apr. 15, 1889.
- BONNARD, Pierre, France, Oct. 30, 1867.
- BRANCUSI, Constantin, b. Rumania, 1876.
- BRANGWYN, Frank, b. Bruges, Belgium, May 13, 1867.
- BRAQUE, George, b. Argenteuil, France, 1881.
- BROOK, Alexander, b. Brooklyn, N. Y., July 14, 1898.
- BURCHFIELD, Charles E., b. Ashtabula, O., April 9, 1893.
- CADMUS, Paul, b. New York City, N. Y., Dec. 17, 1904.
- CHAGALL, Marc, b. Vitebsk, Russia, 1887.
- CHAPIN, Francis, b. Bristolville, O., Feb. 14, 1899.
- CHIRICO, Giorgio di, b. Volo, Greece, July 10, 1888.
- COSTIGAN, John Edward, b. Providence, R. I., Feb. 29, 1888.
- DALI, Salvador, b. Figueras, Spain, May 11, 1904.
- DAVIDSON, Jo, b. New York, N. Y., March 30, 1883.
- DAVIS, Stuart, b. Philadelphia, Pa., Dec. 7, 1894.
- De SEGONZAC, Andre Dunoyer, b. Boussy-Sainte-Antoine, France, 1884.
- GROPPER, William, b. New York City, N. Y., Dec. 3, 1897.
- GROSZ, George, b. Berlin, Germany, July 26, 1893.
- HASELTINE, Herbert, b. Rome, Italy, April 10, 1877.
- HOPPER, Edward, b. Nyack, N. Y., July 22, 1882.
- KANTOR, Morris, b. Russia, April 15, 1896.
- KARFIOL, Bernard, b. Budapest, Hungary, (Amer. parents), May 6, 1886.
- KENT, Rockwell, b. Tarrytown Heights, N. Y., June 21, 1882.
- KLEE, Paul, b. Berne, Switzerland, December 18, 1879.
- KOKOSCHKA, Oskav, b. Pöchlarn, Austria, March 1, 1886.
- KROLL, Leon, b. N. Y. C., Dec. 6, 1884.
- KUHN, Walt, b. N. Y. C., Oct. 27, 1880.
- KUNIYOSHI, Yasuo, b. Okayama, Japan, Sept. 1, 1893.
- MARSH, Reginald, b. Paris, France, March 14, 1898.
- MATISSE, Henri, b. Le Cateau, France, Dec. 31, 1869.
- MATTSON, Henry Elis, b. Gothenburg, Sweden, Aug. 7, 1887.
- MIRO, Juan, b. Barcelona, Spain, April 20, 1893.
- NOGUCHI, Isamu, b. Los Angeles, Calif., Nov. 17, 1904.
- O'KEEFE, Georgia, b. Sun Prairie, Wis., 1887.
- OROZCO, José Clemente, b. Zapotlan, Jalisco, Mexico, 1883.
- PEIRCE, Waldo, b. Bangor, Maine, Dec. 17, 1884.
- PICASSO, Pablo, b. Málaga, Spain, 1881.
- POOR, Henry Varnum, b. Chapman, Kans., Sept. 30, 1888.
- QUINTANILLA, Luis, b. Santandar, Spain, June 13, 1895.
- RATTNER, Abraham, b. Poughkeepsie, N. Y., 1893.
- RIVERA, Diego, b. Guanajuato, Mexico, 1886.
- ROBINSON, Boardman, b. Somerset, Nova Scotia, Sept. 6, 1876.
- ROCKWELL, Norman, b. New York City, N. Y., Feb. 3, 1894.
- ROUAULT, Georges, b. Paris, France, May 27, 1871.
- SAMPLE, Paul S., b. Louisville, Ky., Sept. 14, 1896.
- SEYFFERT, Leopold, b. California, Mo., 1887.
- SHEELER, Charles, b. Phila., Pa., July 16, 1883.
- SIQUEIROS, David, b. Chihuahua, Mexico, 1898.
- SLOAN, John, b. Lock Haven, Pa., Aug. 2, 1871.
- SOYER, Isaac, b. Russia, April 23, 1907.
- SOYER, Moses, b. Russia, Dec. 25, 1899.
- SOYER, Raphael, b. Russia, Dec. 25, 1899.
- SPEICHER, Eugene, b. Buffalo, N. Y., April 5, 1883.
- STERNE, Maurice, b. Libau, Russia, July 13, 1878.
- THIEME, Anthony, b. Rotterdam, Netherlands, Feb. 20, 1888.
- UTRILLO, Maurice, b. Paris, France, Dec. 25, 1883.
- VLAMINCK, Maurice De, b. Paris, France, April 4, 1876.
- WEBER, Max, b. Biyalistok, Russia, April 18, 1881.
- WRIGHT, Frank Lloyd, b. Richland Center, Wis., June 8, 1869.
- ZORACH, William, b. Eurburg, Lithuania, Feb. 28, 1887.

ENTERTAINMENT

CONCERT MUSIC

- ALDA, Frances, b. Christchurch, New Zealand, May 31, 1883.
- ANDERSON, Marian, b. Philadelphia, Pa., Feb. 17, 1902.
- ARRAU, Claudio, b. Chillan, Chile, Feb. 6, 1903.
- BACCOLONI, Salvatore, b. Rome, Italy, 1900.
- BAMPTON, Rose, b. Cleveland, Ohio, Nov. 28, 1909.
- BARBER, Samuel, b. West Chester, Pa., March 9, 1910.
- BARBIROLLI, John, b. London, Eng., Dec. 2, 1899.
- BARER, Simon, b. Odessa, Russia, 1896.
- BARLOW, Howard, b. Plain City, Ohio, May 1, 1892.
- BEECHAM, Sir Thomas, b. Lancaster, England, April 29, 1879.
- BENNETT, Robert Russell, b. Kansas City, Mo., June 15, 1894.
- BERNSTEIN, Leonard, b. Lawrence, Mass., Aug. 25, 1918.
- BJOERLING, Jussi, b. Stora Tuna, Sweden, Feb. 2, 1911.
- BLITZSTEIN, Marc, b. Philadelphia, Pa., March 2, 1905.
- BLOCH, Ernest, b. Geneva, Switzerland, July 24, 1880.
- BOND, Carrie Jacobs, b. Janesville, Wis., Aug. 11, 1862.
- BORI, Lucrezia, b. Valencia, Spain, Dec. 24, 1888.
- BRAILOWSKY, Alexander, b. Kiev, Russia, Feb. 16, 1896.
- BRANZELL, Karin, b. Stockholm, Sweden, Sept. 24, 1897.
- BROWNLEE, John, b. Geelong, Australia, Jan. 7, 1901.
- BUSCH, Adolph, b. Siegen, Germany, Aug. 8, 1891.
- BUSCH, Fritz, b. Siegen, Germany, March 13, 1890.
- CADMAN, Charles Wakefield, b. Johnstown, Pa., Dec. 24, 1881.
- CARPENTER, John Alden, b. Park Ridge, Ill., Feb. 28, 1876.
- CASADESUS, Robert Marell, b. Paris, France, April 7, 1899.
- CASALS, Pablo, b. Vendrell, Spain, Dec. 29, 1876.
- CASELLA, Alfredo, b. Turin, Italy, July 25, 1883.
- CASTAGNA, Bruna, b. Milan, Italy, Oct. 15, 1908.
- COATES, Albert, b. St. Petersburg, Russia, April 23, 1882.
- COATES, Eric, b. Hucknall, Eng., Aug. 27, 1886.
- COPLAND, Aaron, b. Brooklyn, N. Y., Nov. 14, 1900.
- CORTOT, Alfred, b. Nyon, France, Sept. 26, 1877.
- CROOKS, Richard, b. Trenton, N. J., June 26, 1900.
- DAMROSCH, Walter J., b. Breslau, Silesia, Prussia, Jan. 30, 1862.
- DEFAUW, Desiré, b. Ghent, Belgium, Sept. 5, 1885.
- DE LUCA, Giuseppe, b. Rome, Italy, Dec. 29, 1876.
- EAMES, Emma, b. Shanghai, China, Aug. 13, 1865.
- ELMAN, Misha, b. Talnoye, Russia, Jan. 20, 1891.
- ENESCO, Georges, b. Dorohol, Rumania, Aug. 19, 1881.
- FARRAR, Geraldine, b. Melrose, Mass., Feb. 28, 1882.
- FLAGSTAD, Kirsten, b. Hamar, Norway, July 12, 1895.
- FURTWANGLER, Willem, b. Berlin, Germany, Jan. 25, 1886.
- GALLI-CURCI, Amelita, b. Milan, Italy, Nov. 18, 1889.
- GANZ, Rudolph, b. Zurich, Switzerland, Feb. 24, 1877.
- GARDEN, Mary, b. Aberdeen, Scotland, Feb. 20, 1877.
- GERHARDT, Elena, b. Leipzig, Germany, Nov. 11, 1883.
- GIANNINI, Dusolina, b. Philadelphia, Pa., Dec. 19, 1904.
- GIESEKING, Walter, b. Lyons, France, Nov. 5, 1895.
- GOLDMAN, Edwin Franco, b. Louisville, Ky., Jan. 1, 1878.
- GOLSCHMANN, Vladimir, b. Paris, France, Dec. 16, 1893.
- GOOSENS, Leon, b. Liverpool, England, 1896.
- GOOSENS, Eugene, b. London, Eng., May 26, 1893.
- GRAINGER, Percy Aldride, b. Brighton, Victoria, Australia, July 8, 1882.
- GRANDJANY, Marcel, b. Paris, France, Sept. 3, 1891.
- HANSON, Howard, b. Wahoo, Nebr., Oct. 28, 1896.
- HARRIS, Roy, b. Lincoln County, Okla., Feb. 12, 1898.
- HAYES, Roland, b. Curryville, Ga., June 3, 1887.
- HEIFETZ, Jascha, b. Vilna, Russia, Feb. 2, 1901.
- HESS, Myra, b. London, Eng., Feb. 25, 1890.

- HINDEMITH, Paul, b. Hanau, Germany, Nov. 16, 1895.
- HOFMANN, Josef, b. Cracow, Poland, Jan. 20, 1876.
- HOMER, Louise, b. Pittsburgh, Pa., April 30, 1871.
- HONEGGER, Arthur, b. Le Havre, France, March 10, 1892.
- HOROWITZ, Vladimir, b. Kiev, Russia, Oct. 1, 1904.
- ITURBI, José, b. Valencia, Spain, Nov. 28, 1895.
- JANSSEN, Werner, b. New York, N. Y., June 1, 1900.
- JEPSON, Helen, b. Titusville, Pa., Nov. 25, 1906.
- JERITZA, Maria, b. Brunn, Austria, Oct. 6, 1887.
- JOHNSON, Edward, b. Guelph, Ont., Canada, Aug. 22, 1881.
- KIEPURA, Jan, b. Sosnowiec, Poland, May 16, 1902.
- KINDLER, Hans, b. Rotterdam, Holland, Jan. 8, 1893.
- KIPNIS, Alexander, b. Jitonir, Russia, Feb. 1, 1891.
- KIRKPATRICK, Ralph, b. Leominster, Mass., June 10, 1911.
- KLEIBER, Erich, b. Vienna, Austria, Aug. 5, 1890.
- KORNGOLD, Erich, b. Brunn, Austria, May 29, 1897.
- KOSTELANETZ, André, b. St. Petersburg, Russia, Dec. 22, 1901.
- KOUSSEVITZKY, Serge, b. Tver, Russia, July 26, 1874.
- KREISLER, Fritz, b. Vienna, Austria, Feb. 2, 1875.
- KRENEK, Ernst, b. Vienna, Austria, Aug. 23, 1900.
- KURENKO, Marie, b. Moscow, Russia, 1899.
- LANDOWSKA, Wanda, b. Warsaw, Poland, July 5, 1879.
- LANGE, Hans, b. Constantinople, Turkey, Feb. 17, 1884.
- LAURI-VOLPI, Giacomo, b. Rome, Italy, Dec. 11, 1894.
- LAWRENCE, Marjorie, b. Victoria, Australia, Feb. 17, 1909.
- LEHMANN, Lotte, b. Perleberg, Germany, Feb. 27, 1888.
- LEINSDORF, Erich, b. Vienna, Austria, Feb. 4, 1912.
- LEVANT, Oscar, b. Pittsburgh, Pa., Dec. 27, 1906.
- LIST, Emanuel, b. Rome, Italy, Dec. 29, 1876.
- MARTINELLI, Giovanni, b. Montagnana, Italy, Oct. 22, 1885.
- MATZENAUER, Margarete, b. Tenesvár, Hungary, June 1, 1881.
- MAYNOR, Dorothy, b. Norfolk, Va., Sept. 3, 1910.
- MELCHIOR, Lauritz, b. Copenhagen, Denmark, March 20, 1890.
- MELTON, James, b. Moultrie, Ga., Jan. 2, 1904.
- MENGELBERG, Willem, b. Utrecht, Netherlands, March 28, 1871.
- MENUHIN, Yehudi, b. New York, N. Y., April 22, 1916.
- MILHAUD, Darius, b. Aix-en-Provence, France, Sept. 4, 1892.
- MILSTEIN, Nathan, b. Odessa, Russia, Jan. 31, 1904.
- MITROPOULOS, Dmitri, b. Athens, Greece, March 1, 1896.
- MOISEVITCH, Benno, b. Odessa, Russia, Feb. 22, 1890.
- MOORE, Grace, b. Del Rio, Tenn., Dec. 5, 1901.
- MORINI, Erica, b. Vienna, Austria, Jan. 5, 1910.
- NOVAES, Guilomar, b. São João da Boa Vista, Brazil, Feb. 28, 1895.
- NOVOTNA, Jarmila, b. Prague, Austria, Sept. 23, 1911.
- ORMANDY, Eugène, b. Budapest, Hungary, Nov. 18, 1899.
- PELLETIER, Wilfred, b. Montreal, Canada, June 30, 1896.
- PERSINGER, Louis, b. Rochester, Ill., Feb. 11, 1887.
- PETRI, Egon, b. Hannover, Germany, March 23, 1881.
- PHILIPP, Isidore, b. Budapest, Hungary, Sept. 2, 1863.
- PIATIGORSKY, Gregor, b. Ekaterinoslav, Russia, April 17, 1903.
- PINZA, Ezio, b. Rome, Italy, May 18, 1892.
- PONS, Lily, b. Cannes, France, April 13, 1904.
- PRIMROSE, William, b. Glasgow, Scotland, Aug. 23, 1904.
- PROKOFIEFF, Serge, b. Sonzovka, Russia, April 23, 1891.
- RAISA, Rosa, b. Bialystok, Poland, May 30, 1893.
- REINER, Fritz, b. Budapest, Hungary, Dec. 19, 1888.
- RETHBERG, Elizabeth, b. Schwarzenberg, Germany, Dec. 22, 1894.
- ROBESON, Paul, b. Princeton, N. J., April 9, 1898.
- RODZINSKI, Artur, b. Spalato, Dalmatia, Yugoslavia, Jan. 2, 1894.
- RUBINSTEIN, Artur, b. Lodz, Poland, Jan. 28, 1886.
- SALMOND, Felix, b. London, Eng., Nov. 19, 1888.
- SALZEDO, Carlos, b. Arachon, France, April 6, 1885.

SAYAO, Bidú, b. Rio de Janeiro, Brazil, May 11, 1908.

SCHIPA, Tito, b. Lecce, Italy, Jan. 2, 1890.

SCHNABEL, Artur, b. Lipnik, Austria, April 11, 1882.

SCHONBERG, Arnold, b. Vienna, Austria, Sept. 13, 1874.

SCHUMAN, William, b. New York, N. Y., Aug. 4, 1910.

SCHUMANN, Elizabeth, b. Merseburg, Germany, June 13, 1888.

SEGOVIA, André, b. Linares, Spain, Feb. 18, 1894.

SERKIN, Rudolph, b. Eger, Austria, March 28, 1903.

SESSIONS, Roger, b. Brooklyn, N. Y., Dec. 28, 1896.

SHOSTAKOVITCH, Dimitri Dimitrievich, b. St. Petersburg, Russia, Sept. 25, 1906.

SIBELIUS, Johan Julius, b. Tavastehus, Finland, Dec. 8, 1865.

SMALLENS, Alexander, b. St. Petersburg, Russia, Jan. 1, 1889.

SPALDING, Albert, b. Chicago, Ill., Aug. 15, 1888.

STOKOWSKI, Leopold, b. London, Eng., April 18, 1882.

STRAUS, Oskar, b. Vienna, Austria, April 6, 1870.

STRAUSS, Richard, b. Munich, Germany, June 11, 1864.

STRAVINSKY, Igor Fëdorovich, b. St. Petersburg, Russia, June 5, 1882.

SWARTHOUT, Gladys, b. Deepwater, Mo., Dec. 25, 1904.

SZELL, George, b. Budapest, Hungary, June 7, 1897.

SZIGETI, Joseph, b. Budapest, Hungary, Sept. 5, 1892.

TAUBER, Richard, b. Linz, Austria, May 16, 1892.

TAYLOR, Deems, b. New York, N. Y., Dec. 22, 1885.

TEMPLETON, Alec, b. Cardiff, South Wales, July 4, 1910.

TEYTE, Maggie, b. Wolverhampton, Eng., April 17, 1889.

THOMAS, John Charles, b. Meyersdale, Pa., Sept. 6, 1891.

THORBORG, Kerstin, b. Venjan, Sweden, May 19, 1906.

TIBBETT, Lawrence, b. Bakersfield, Calif., Nov. 16, 1896.

TOSCANINI, Arturo, b. Parma, Italy, March 25, 1867.

VILLA-LOBOS, Heitor, b. Rio De Janeiro, Brazil, March 5, 1881.

WALLENSTEIN, Alfred, b. Chicago, Ill., Oct. 7, 1898.

WALTER, Bruno, b. Berlin, Germany, Sept. 15, 1876.

WALTON, William, b. Oldham, Eng., March 29, 1902.

WARREN, Leonard, b. New York, N. Y., April 21, 1911.

WILLIAMS, Ralph Vaughan, b. Down Ampney, Eng., Oct. 12, 1872.

ZIMBALIST, Efrem, b. Rostov, Russia, April 9, 1889.

SCREEN • STAGE • RADIO

ABBOTT, Bud, b. Atlantic City, N. J., Oct. 2, 1895.

ABBOTT, George, b. Forestville, N. Y., June 25, 1889.

ADAMS, Maude, b. Salt Lake City, Utah, Nov. 11, 1872.

ADLER, Lawrence Cecil, b. Baltimore, Md., Feb. 10, 1914.

AHERNE, Brian, b. Worcestershire, Eng., May 2, 1902.

ALBERT, Eddie (Eddie Albern Heimberher), b. Rock Island, Ill., April 22, 1908.

ALDA, Robert (Alphonso D'Abruzzo), b. New York, N. Y., Feb. 26, 1914.

ALLEN, Fred, b. Cambridge, Mass., May 31, 1894.

ALLGOOD, Sara, b. Dublin, Ireland, Oct. 31, 1883.

AMECHE, Don, b. Kenosha, Wis., 1908.

ANDERSON, Judith, b. Adelaide, So. Australia, 1898.

ANDREWS, Dana, b. Collins, Miss., Jan. 1, 1912.

ARLEN, Harold, b. Buffalo, N. Y., Feb. 15, 1905.

ARNOLD, Edward, b. New York, N. Y., Feb. 18, 1890.

ARTHUR, Jean, b. New York, N. Y., Oct. 17, 1908.

ASTAIRE, Fred (Frederick Austerlitz), b. Omaha, Nebr., 1900.

AUER, Mischa, b. St. Petersburg, Russia, Nov. 17, 1905.

AUTRY, Gene, b. Tioga, Texas, Sept. 29, 1907.

BACALL, Lauren, b. New York, N. Y., Sept. 16, 1924.

BAINTER, Fay, b. Los Angeles, Calif., 1893.

BAKER, Kenny, b. Monrovia, Calif., Sept. 30, 1912.

BAKER, Phil, b. Philadelphia, Pa., Aug. 24, 1898.

BALANCHINE, George, b. Petrograd, Russia, Jan. 9, 1904.

BALL, Lucille, b. Butte, Mont., Aug. 6, 1911.

BANKHEAD, Tallulah Brockman, b. Huntsville, Ala., Jan. 31, 1902.

BANKS, Leslie, b. Liverpool, Eng., June 9, 1890.

- BARNES, Binnie, b. London, Eng., Mar. 25, 1908.
- BARRIE, Wendy, b. Hongkong, China, 1913.
- BARRYMORE, Diana, b. New York, N. Y., Mar. 3, 1921.
- BARRYMORE, Ethel, b. Philadelphia, Pa., Aug. 15, 1879.
- BARRYMORE, Lionel, b. Philadelphia, Pa., April 12, 1878.
- BARTHELMESS, Richard, b. New York, N. Y., May 9, 1897.
- BARTHOLOMEW, Freddie, b. London, Eng., Mar. 28, 1924.
- BARTON, James, b. Gloucester, N. J., Nov. 1, 1890.
- BASIE, William (Count), b. Red Bank, N. J., Aug. 21, 1906.
- BAXTER, Anne, b. Michigan City, Ind., May 7, 1923.
- BAXTER, Warner, b. Columbus, Ohio, Mar. 29, 1893.
- BEERY, Wallace, b. Kansas City, Mo., April 1, 1889.
- BELLAMY, Ralph, b. Chicago, Ill., June 17, 1905.
- BENDIX, William, b. New York, N. Y., Jan. 14, 1906.
- BENNETT, Constance, b. New York, N. Y., Oct. 22, 1905.
- BENNETT, Joan, b. Palisades, N. J., Feb. 27, 1910.
- BENNY, Jack, b. Waukegan, Ill., Feb. 14, 1894.
- BERGEN, Edgar, b. Chicago, Ill., Feb. 16, 1903.
- BERGMAN, Ingrid, b. Sweden, 1917.
- BERGNER, Elisabeth, b. Vienna, Austria, Aug. 22, 1900.
- BERLE, Milton (Milton Berlinger), b. New York, N. Y., July 12, 1908.
- BERLIN, Irving, b. Russia, May 11, 1888.
- BLONDELL, Joan, b. New York, N. Y., Aug. 30, 1909.
- BOGART, Humphrey, b. New York, N. Y., Dec. 25, 1899.
- BOLGER, Raymond Wallace, b. Boston, Mass., Jan. 10, 1904.
- BORZAGE, Frank, b. Salt Lake City, Utah, April 23, 1893.
- BOYD, William, b. Cambridge, Ohio, June 5, 1898.
- BOYER, Charles, b. Figeac, France, Aug. 28, 1899.
- BRACKEN, Eddle, b. Astoria, N. Y., Feb. 7, 1920.
- BRENT, George, b. Dublin, Ireland, Mar. 15, 1904.
- BRICE, Fanny, b. New York City, Oct. 29, 1891.
- BROWN, Joe E., b. Holgate, Ohio, July 28, 1892.
- BRUCE, Nigel, b. San Diego, Calif., Feb. 4, 1895.
- BUZZELL, Edward, b. Brooklyn, N. Y., Nov. 13, 1897.
- CAGNEY, James, b. New York, N. Y., July 1, 1904.
- CANTOR, Eddie, b. New York, N. Y., Jan. 31, 1892.
- CALHERN, Louis, b. New York, N. Y., 1895.
- CALLOWAY, Cab, b. Rochester, N. Y., Dec. 25, 1907.
- CAPRA, Frank R., b. Palermo, Italy, May 19, 1897.
- CARMICHAEL, Hoagy, b. Bloomington, Ind., Nov. 22, 1899.
- CARROLL, Madeleine, b. West Bromwich, Eng., Feb. 26, 1906.
- CARSON, Jack, b. Carman, Manitoba, Canada, Oct. 27, 1910.
- CAVALLERO, Carmen, b. New York, N. Y., May 6, 1913.
- CHAPLIN, Charlie, b. London, England, April 16, 1889.
- CHEVALIER, Maurice, b. France, Sept. 12, 1893.
- CHRISTIANS, Mady, Vienna, Austria, Jan. 19, 1900.
- CLAIRE, Ina (Ina Fagan), b. Washington, D. C., Oct. 15, 1892.
- CLARK, Bobby, b. Springfield, Ohio, 1888.
- CLARK, Dane, b. New York, N. Y., Feb. 18, 1913.
- COBURN, Charles, b. Savannah, Ga., June 19, 1877.
- COLBERT, Claudette (Claudette Chau-chion), b. Paris, France, Sept. 13, 1905.
- COLLINGE, Patricia, b. Dublin, Ireland, Sept. 20, 1894.
- COLMAN, Ronald, b. Richmond, Surrey, Eng., Feb. 9, 1891.
- COOGAN, Jackie, b. Los Angeles, Calif., Oct. 26, 1914.
- COOPER, Gary, b. Helena, Mont., May 7, 1901.
- COOPER, Jackie, b. Los Angeles, Calif., Sept. 15, 1921.
- CORNELL, Katherine, b. Berlin, Germany, Feb. 16, 1898.
- COSTELLO, Lou, b. Paterson, N. J., Mar. 6, 1906.
- COTTON, Joseph, b. Petersburg, Va., 1905.
- COWL, Jane, b. Boston, Mass., Dec. 14, 1884.
- CRAIG, James, b. Nashville, Tenn., Feb. 4, 1912.
- CRAIN, Jeanne, b. Barstow, Calif., May 25, 1925.
- CRAWFORD, Joan, b. San Antonio, Texas, Mar. 23, 1908.
- CROSBY, Harry L. (Bing), b. Tacoma, Wash., May 2, 1904.

- ROSS, Milton, b. New York, N. Y., Apr. 16, 1897.
- TUMMINGS, Constance, b. Seattle, Wash., May 15, 1910.
- TUMMINGS, Robert, b. Joplin, Mo., June 9, 1910.
- TURTIZ, Michael, b. Budapest, Hungary, Dec. 24, 1888.
- AVIS, Bette, b. Lowell, Mass., April 5, 1908.
- AY, Laraine (Loraine Johnson), b. Roosevelt, Utah, Oct. 13, 1920.
- DE HAVILLAND, Olivia, b. Tokyo, Japan, July 1, 1916.
- DEL RIO, Dolores, b. Durango, Mexico, Aug. 3, 1905.
- DE MILLE, Cecil B., b. Ashfield, Mass., Aug. 12, 1881.
- DE SYLVA, Buddy, b. New York City, N. Y., Jan. 27, 1896.
- DIETRICH, Marlene, b. Berlin, Germany, Dec. 27, 1902.
- DISNEY, Walter E. (Walt), b. Chicago, Ill., Dec. 5, 1901.
- DONAT, Robert, b. Manchester, Eng., Mar. 18, 1905.
- DORSEY, Tommy, b. Mahoney Plains, Pa., Nov. 19, 1905.
- DOUGLAS, Melvyn, b. Macon, Ga., April 5, 1901.
- DOWLING, Eddie, b. Woonsocket, R. I., Dec. 9, 1894.
- DRAPER, Paul, b. Florence, It., Oct. 25, 1909.
- DRAPER, Ruth, b. New York City, N. Y., Dec. 2, 1884.
- DUNN, James, b. New York, N. Y., Nov. 2, 1905.
- DURANTE, Jimmy, b. New York, N. Y., Feb. 19, 1893.
- DURBIN, Deanna, b. Winnipeg, Canada, Dec. 4, 1922.
- EDDY, Nelson, b. Providence, R. I., June 29, 1901.
- EDWARDS, Joan, b. New York, N. Y., July 15, 1920.
- ELLINGTON, Edward K. (Duke), b. Washington, D. C., April 29, 1899.
- EMERSON, Faye (Mrs. Elliott Roosevelt), b. Elizabeth, La., July 8, 1917.
- EVANS, Maurice, b. Dorchester, Eng., June 3, 1901.
- FAIRBANKS, Douglas, Jr., b. New York, N. Y., Dec. 9, 1909.
- FAY, Frank, b. San Francisco, Calif., Nov. 17, 1897.
- FAYE, Alice, b. New York, N. Y., May 5, 1915.
- FIELD, Betty, b. Boston, Mass., Feb. 8, 1918.
- FIELDS, Gracie, b. Rockdale, Eng., Jan. 9, 1898.
- FIELDS, W. C., b. Philadelphia, Pa., Jan. 29, 1879.
- FITZGERALD, Barry (William Joseph Shields), b. Dublin, Ireland, Mar. 10, 1888.
- FITZGERALD, Geraldine, b. Dublin, Ireland, Nov. 24, 1914.
- FLYNN, Errol, b. Ireland, June 20, 1909.
- FONDA, Henry, b. Grand Island, Nebr., May 16, 1905.
- FONTAINE, Joan, b. Tokyo, Japan, Oct. 22, 1917.
- FONTANNE, Lynn, b. London, Eng., 1900.
- FORBES, Ralph (Ralph Taylor), b. London, England, Sept. 30, 1905.
- FOSTER, Preston, b. Ocean City, N. J., Aug. 24, 1902.
- FRANCIS, Kay (Katherine Gibbs), b. Oklahoma City, Okla., Jan. 13, 1905.
- FRIML, Rudolf, b. Prague, Austria, Dec. 7, 1884.
- GABIN, Jean, b. Paris, France, May 17, 1904.
- GABLE, Clark, b. Cadiz, Ohio, Feb. 1, 1901.
- GARBO, Greta (Greta Gustafsson), b. Stockholm, Sweden, Sept. 18, 1906.
- GARDINER, Reginald, b. Wimbledon, Eng., Feb. 1903.
- GARDNER, Ed, b. Astoria, L. I., N. Y., June, 1904.
- GARFIELD, John, b. New York, N. Y., Mar. 4, 1913.
- GARLAND, Judy, b. Grand Rapids, Minn., 1923.
- GARSON, Greer, County Down, Northern Ireland, Sept. 29, 1927.
- GEORGE, Gladys, b. Patton, Maine, Sept. 13, 1904.
- GIELGUD, John, b. London, Eng., April 14, 1904.
- GISH, Dorothy, b. Dayton, Ohio, 1898.
- GISH, Lillian, b. Springfield, Ohio, Oct. 14, 1896.
- GLEASON, James, b. New York, N. Y., May 23, 1886.
- GOLDEN, John, b. New York, N. Y., June 27, 1874.
- GOLDWYN, Samuel, b. Warsaw, Poland, Aug. 27, 1884.
- GOODMAN, Benjamin, b. Chicago, Ill., May 30, 1909.
- GORDON, Max, b. New York City, N. Y., June 28, 1892.
- GORDON, Ruth, b. Wollaston, Mass., Oct. 30, 1896.
- GOULD, Morton, b. Richmond Hill, L. I., N. Y., Dec. 10, 1913.
- GRABLE, Betty, b. St. Louis, Mo., Dec. 18, 1916.
- GRANT, Cary (Archibald Alexander Leach), b. Burke, Eng., Jan. 18, 1904.

- GREENSTREET, Sydney, b. Sandwich, Kent, Eng., Dec. 27, 1879.
- HAMPDEN, Walter, b. Brooklyn, N. Y., June 30, 1879.
- HARDWICKE, Sir Cedric, b. Stourbridge, Eng., Feb. 19, 1893.
- HARRIS, Phil, b. Linton, Ind., June 24, 1906.
- HARRISON, Rex, b. Huyton, Eng., Mar. 5, 1908.
- HAYES, Helen, b. Washington, D. C., Oct. 10, 1900.
- HAYWORTH, Rita (Margarita Cansino), b. New York, N. Y., Oct. 17, 1918.
- HEFLIN, Van, b. Walters, Okla., Dec. 13, 1910.
- HENIE, Sonja, b. Oslo, Norway, April 8, 1913.
- HENREID, Paul, b. Trieste, Italy, Jan. 10, 1908.
- HEPBURN, Katharine, b. Hartford, Conn., 1909.
- HERSHOLT, Jean, b. Copenhagen, Denmark, July 12, 1886.
- HITCHCOCK, Alfred Joseph, b. London, England, Aug. 13, 1899.
- HOLT, Jack, b. Winchester, Va., May 31, 1888.
- HOMOLKA, Oscar, b. Vienna, Austria, 1901.
- HOPE, Bob, b. London, Eng., May 29, 1903.
- HOPKINS, Miriam, b. Bainbridge, Ga., 1902.
- HORNE, Lena, b. Brooklyn, N. Y., 1918.
- HULL, Henry, b. Louisville, Ky., Oct. 3, 1890.
- HULL, Josephine, b. Newtonville, Mass., 1890.
- HUNT, Marsha, b. Chicago, Ill., Oct. 17, 1917.
- HUSTON, Walter, b. Toronto, Canada, April 6, 1884.
- JAFFE, Sam, b. New York, N. Y., March 8, 1898.
- JAMES, Harry, b. Albany, Ga., March 15, 1916.
- JANIS, Elsie, b. Columbus, Ohio, March 16, 1889.
- JESSEL, George, b. New York, N. Y., April 3, 1898.
- JOHNSON, Van, b. Newport, R. I., Aug. 20, 1916.
- JOLSON, Al, b. St. Petersburg, Russia, May 28, 1888.
- JONES, Jennifer (Phyllis Isley), b. Tulsa, Okla., Mar. 2, 1919.
- KARLOFF, Boris (Charles Edward Pratt), b. London, Eng., Nov. 23, 1887.
- KAYE, Danny, b. Brooklyn, N. Y., Jan. 18, 1913.
- KELLY, Gene, b. Pittsburgh, Pa., Aug. 23, 1912.
- KING, Dennis, b. Coventry, Eng., 1897.
- KING, Henry, b. Christianburg, Va., Jan. 24, 1896.
- KNOX, Alexander, b. Strathroy, Ont., Canada, Jan. 16, 1907.
- LADD, Alan, b. Hot Springs, Ark., Sept. 3, 1913.
- LAKE, Veronica (Constance Keane), b. Lake Placid, N. Y., Nov. 14, 1919.
- LAMOUR, Dorothy, b. New Orleans, La., Dec. 10, 1914.
- LANDIS, Carole, b. Fairchild, Wis., Jan. 1, 1919.
- LAUGHTON, Charles, b. Scarborough, Eng., July 1, 1899.
- LAWRENCE, Gertrude, b. London, Eng., July 4, 1900.
- LEE, Gypsy Rose, b. Feb. 9, 1914.
- LE GALLIENNE, Eva, b. London, Eng., Jan. 11, 1899.
- LEIGH, Vivien, b. India, Nov. 5, 1914.
- LEONTOVICH, Eugenie, b. Odessa, Russia, Mar. 21, 1900.
- LE ROY, Mervyn, b. San Francisco, Calif., Oct. 15, 1900.
- LILLIE, Beatrice, b. Toronto, Canada, May 29, 1898.
- LITTLEFIELD, Catherine, b. Philadelphia, Pa., Sept. 16, 1908.
- LLOYD, Harold, b. Burchard, Nebr., April 20, 1893.
- LOCKWOOD, Margaret, b. Karachi, India, 1916.
- LOESSER, Frank, b. New York, N. Y., June 29, 1910.
- LOMBARDO, Guy, b. London, Ont., Canada, June 19, 1902.
- LORRE, Peter, b. Rosenberg, Hungary, June 26, 1904.
- LOUISE, Anita, b. New York, N. Y., 1915.
- LOY, Myrna, b. Helena, Mont., Aug. 2, 1905.
- LUBITSCH, Ernst, b. Berlin, Germany, Jan. 28, 1892.
- LUGOSI, Bela, b. Lugos, Hungary, Oct. 20, 1888.
- LUKAS, Paul, b. Budapest, Hungary, May 26, 1895.
- LUNT, Alfred, b. Milwaukee, Wis., 1893.
- LUPINO, Ida, b. London, Eng., Feb. 4, 1918.
- LYNN, Diana, b. Los Angeles, Calif., Oct. 7, 1926.
- MAC DONALD, Jeannette, b. Philadelphia, Pa., June 18, 1907.
- MAC MURRAY, Fred, b. Kankakee, Ill., Aug. 30, 1908.
- MCCAREY, Leo, b. Los Angeles, Calif., Sept. 6, 1904.
- MCCREA, Joel (Albert), b. Los Angeles, Calif., Nov. 5, 1906.

- C GUIRE, Dorothy, b. Omaha, Nebr., June 14, 1918.
- C LAGLEN, Victor, b. Trumbridge Wells, Eng., 1886.
- ARCH, Fredric (Frederick McIntyre Bickel), b. Racine, Wis., Aug. 31, 1897.
- ARSHALL, Herbert, b. England, May 21, 1890.
- MARTIN, Mary, b. Weatherford, Tex., Dec. 1, 1913.
- IARX, Arthur (Harpo), b. New York, N. Y., Nov. 21, 1893.
- IARX, Julius (Groucho), b. New York, N. Y., Oct. 2, 1895.
- IARX, Leonard (Chico), b. New York, N. Y., Mar. 26, 1891.
- IASON, James, b. Hudders' Field, Eng., May 15, 1909.
- ASSEY, Raymond, b. Toronto, Canada, Aug. 30, 1896.
- MAXWELL, Elsa, b. Keokuk, Iowa, May 24, 1883.
- MAYER, Louis B, b. Minsk, Russia, July 4, 1885.
- MENJOU, Adolphe, b. Pittsburgh, Pa., Feb. 18, 1890.
- MERMAN, Ethel, b. Astoria, N. Y., Jan. 16, 1909.
- MILLAND, Ray, b. Neath, Wales, Jan. 3, 1908.
- MIRANDA, Carmen, b. Lisbon, Portugal, 1913.
- MONTGOMERY, Robert, b. Beacon, N. Y., May 21, 1904.
- MOORE, Victor, b. Hammonton, N. J., Feb. 24, 1876.
- MORGAN, Dennis (Stanley Morner), b. Prentice, Wis., Dec. 10, 1920.
- MORGAN, Frank (Frank Wupperman), b. New York, N. Y., June 1, 1890.
- MUNI, Paul (Weisenfreund), b. Lemberg, Austria, Sept. 22, 1895.
- MURRAY, Arthur, b. New York, N. Y., Apr. 4, 1895.
- NEGRI, Pola, b. Poland, 1899.
- NICHOLS, Dudley, b. Wapakoneta, Ohio, April 6, 1905.
- NIJINSKY, Waslaw, b. Kiev, Russia, Feb. 28, 1890.
- NUGENT, Elliott, b. Dover, Ohio, Sept. 20, 1900.
- OKIE, Jack, b. Sedalia, Mo., Nov. 12, 1903.
- OBERON, Merle (Estelle Merle O'Brien Thompson), b. Tasmania, Feb. 19, 1911.
- O'BRIEN, Margaret, b. Los Angeles, Calif., Jan. 15, 1937.
- O'BRIEN, Pat, b. Milwaukee, Wis., Nov. 11, 1899.
- O'HARA, Maureen, b. Dublin, Ireland, Aug. 17, 1920.
- OLIVIER, Laurence, b. Dorking, Surrey, Eng., May 22, 1907.
- O'SULLIVAN, Maureen, b. Boyle, Ireland, May 17, 1911.
- OUSPENSKAYA, Maria, b. Tula, Russia, July 29, 1887.
- PASTERNAK, Joe, b. Szilagysomlyo, Hungary, Sept. 7, 1901.
- PECK, Gregory, b. La Jolla, Calif., April 5, 1916.
- PICKFORD, Mary, b. Toronto, Canada, Apr. 8, 1893.
- PIDGEON, Walter, b. East St. John, New Brunswick, Canada, Sept. 23, 1898.
- PORTER, Cole, b. Peru, Ind., June 9, 1893.
- POWELL, Richard E. (Dick), b. Mt. View, Ark., Nov. 14, 1904.
- POWELL, William, b. Kansas City, Mo., July 27, 1892.
- POWER, Tyrone, b. Cincinatti, Ohio, May 5, 1913.
- PREMINGER, Otto, b. Vienna, Austria, Dec. 15, 1906.
- PRICE, Vincent, b. St. Louis, Mo., May 27, 1911.
- RAFT, George, b. New York, N. Y., Sept. 27, 19?.
- RAINER, Luise, b. Vienna, Austria, 1912.
- RAINS, Claude, b. London, Eng., Nov. 10, 1890.
- RASCH, Albertina, b. Vienna, Austria, 1896.
- RATHBONE, Basil, b. South Africa, June 13, 1892.
- RATOFF, Gregory, b. St. Petersburg, Russia, April 20, 1897.
- REED, Alan, b. New York, N. Y., Aug. 20, 1907.
- RICE, Florence, b. Cleveland, Ohio, Feb. 14, 1911.
- RICHARDSON, Ralph, b. Cheltenham, Eng., Dec. 19, 1902.
- ROBINSON, Bill, b. Richmond, Va., May 25, 1878.
- ROBINSON, Edward G., b. Bucharest, Rumania, Dec. 12, 1893.
- RODGERS, Richard, b. New York, N. Y., June 28, 1902.
- ROGERS, Ginger (Virginia Katherine McMath), b. Independence, Mo., July 16, 1911.
- ROGERS, Roy (Leonard Slye), b. Cincinnati, Ohio, Nov. 5, 1912.
- ROMBERG, Sigmund, b. Szegedin, Hungary, July 29, 1887.
- ROMERO, Cesar, b. New York, N. Y., Feb. 15, 1907.
- ROONEY, Mickey (Joe Yule, Jr.), Brooklyn, N. Y., Sept. 23, 1922.
- ROSE, Billy, b. New York, N. Y., Sept. 6, 1899.

- RUSSELL, Rosalind, b. Waterbury, Conn., June 4, 19?.
- ST. DENIS, Ruth, b. Newark, N. J., Jan. 20, 1880.
- SANDERS, George, b. St. Petersburg, Russia, 1906.
- SANDERSON, Julia, b. Springfield, Mass., Aug. 22, 1887.
- SCHILDKRAUT, Joseph, b. Vienna, Austria, Mar. 22, 1895.
- SCOTT, Martha, b. Jamesport, N. Y., Sept. 22, 1916.
- SCOTT, Raymond, b. Brooklyn, N. Y., Sept. 10, 1909.
- SCOTT, Zachary, b. Austin, Texas, Feb. 24, 1914.
- SELZNICK, David Oliver, b. Pittsburgh, Pa., May 10, 1902.
- SHAWN, TED, b. Kansas City, Mo., Oct. 21, 1891.
- SHEAN, Al, b. Dornum, Germany, 1868.
- SHEARER, Norma, b. Montreal, Canada, Aug. 10, 1904.
- SHERIDAN, Ann, b. Dallas, Texas, Feb. 21, 1915.
- SHIRLEY, Ann, b. New York, N. Y., April 17, 1918.
- SHORE, Dinah, b. Winchester, Tenn., Mar. 1, 1917.
- SIDNEY, Sylvia, b. New York, N. Y., Aug. 8, 1910.
- SIMON, Simone, b. Marseilles, France, April 23, 1914.
- SINATRA, Frank, b. Hoboken, N. J., Dec. 12, 1917.
- SKINNER, Cornelia Otis, b. Chicago, Ill., May 30, 1907.
- SLEEPER, Martha, b. Lake Bluff, Ill., June 24, 1911.
- SLEZAK, Walter, b. Vienna, Austria, May 3, 1902.
- SMITH, Sir C. Aubrey, b. London, Eng., July 21, 1863.
- SMITH, Kate, b. Washington, D. C., 1910.
- SOTHERN, Ann (Harriet Lake), b. Valley City, N. D., Jan. 22, 1911.
- STANWYCK, Barbara, b. Brooklyn, N. Y., July 16, 1907.
- STEWART, James, b. Indiana, Pa., May 20, 1908.
- STOLZ, Robert, b. Groz, Austria, Aug. 25, 1886.
- STONE, Fred Andrew, b. Valmont, Colo., Aug. 19, 1873.
- STURGES, Preston, b. Chicago, Ill., Aug. 29, 1898.
- TAUOG, Norman, b. Chicago, Ill., Feb. 23, 1899.
- TAYLOR, Robert (Arlington Brough), b. Tilley, Nebr., Aug. 5, 1911.
- TEARLE, Godfry, b. New York, N. Y., Oct. 12, 1884.
- TEMPLE, Shirley, b. Santa Monica, Calif., April 23, 1929.
- TIERNEY, Gene, b. Brooklyn, N. Y., Nov. 20, 1920.
- TONE, Franchot, b. Niagara Falls, N. Y., Feb. 27, 1905.
- TOOMEY, Regis, b. Pittsburgh, Pa., Aug. 13, 1902.
- TRACY, Spencer, b. Milwaukee, Wis., April 5, 1900.
- TRUEX, Ernest, b. Kansas City, Mo., Sept. 19, 1890.
- TUCKER, Sophie, b. Boston, Mass., 1884.
- TURNER, Lana, b. Wallace, Idaho, Feb. 8, 1920.
- VALLEE, Rudy, b. Island Pond, Vt., July 28, 1901.
- VIDOR, King Louis, b. Galveston, Texas, Feb. 8, 1894.
- VON STROHEIM, Erich, b. Vienna, Austria, Sept. 22, 1885.
- WARING, Fred, b. Tyrone, Pa., June 9, 1900.
- WARREN, Harry, b. Brooklyn, N. Y., Dec. 24, 1893.
- WATERS, Ethel, b. Chester, Pa., Oct. 21, 1900.
- WELLES, George Orson, b. Kenosha, Wis., May 6, 1915.
- WEST, Mae, b. Brooklyn, N. Y., 1892.
- WHITEMAN, Paul, b. Denver, Colo., March 28, 1891.
- WHITTY, Dame May, b. Liverpool, Eng., June 19, 1865.
- WILDE, Cornel, b. New York, N. Y., Oct. 13, 1915.
- WOOD, Samuel Grosvenor, b. Philadelphia, Pa., July 10, 1884.
- WRIGHT, Teresa, b. New York, N. Y., Oct. 27, 1919.
- WYATT, Jane, b. New York, N. Y., Aug. 10, 1913.
- WYLER, William, b. Mulhouse, France, July 1, 1902.
- WYMAN, Jane, b. St. Joseph, Mo., Jan. 1, 1914.
- WYNN, Ed, b. Philadelphia, Pa., Nov. 9, 1886.
- WYNN, Keenan, b. New York, N. Y., July 27, 1916.
- YOUNG, Loretta, b. Salt Lake City, Utah, Jan. 6, 1913.
- YOUNG, Robert, b. Chicago, Ill., Feb. 22, 1907.
- YOUNG, Roland, b. London, Nov. 11, 1887.
- ZORINA, Vera, b. Kristiansand, Norway, Jan. 2, 1917.
- ZUKOR, Adolph, b. Ricse, Hungary, Jan. 7, 1873.

SPORTS

BASEBALL

- ALEXANDER, Grover C., b. St. Paul, Nebr., Feb. 26, 1887.
- AKER, Del, b. Sherwood, Oreg., May 3, 1892.
- AKER, J. Franklin, b. Trappe, Md., Mar. 13, 1886.
- ANCROFT, Dave, b. Sioux City, Iowa, April 20, 1892.
- ARROW, Edward G., b. Springfield, Ill., May 10, 1868.
- BLUEGE, Ossie, b. Chicago, Ill., Oct. 24, 1900.
- BREADON, Sam, b. New York City, July 26, 1880.
- BRIGGS, Walter O., Jr., b. Detroit, Mich., Jan. 20, 1912.
- CAREY, Max G., b. Terre Haute, Ind., Jan. 11, 1890.
- CHANDLER, A. B. (Happy), b. Corydon, Ky., July 14, 1898.
- COAKLEY, Andy, b. Providence, R. I., Nov. 20, 1882.
- COBB, Tyrus R., (Ty), b. Banks County, Ga., Dec. 17, 1886.
- COCHRANE, Gordon S. (Mickey), b. Bridgewater, Mass., Apr. 6, 1903.
- COMBS, Earle B., b. Peabworth, Ky., May 14, 1901.
- COOPER, Mort, b. Asherton, Mo., Mar. 2, 1914.
- CRAVATH, Clifford C., b. San Diego, Calif., Mar. 28, 1882.
- CRONIN, Joe, b. San Francisco, Calif., Oct. 12, 1906.
- DEAN, Jerome H. (Dizzy), b. Haldenville, Okla., Jan. 16, 1911.
- DICKEY, Bill, b. Bastrop, La., June 6, 1907.
- DIMAGGIO, Dom, b. San Francisco, Calif., Feb. 12, 1918.
- DIMAGGIO, Joe, b. Martinez, Calif., Nov. 25, 1914.
- DUROCHER, Leo, b. West Springfield, Mass., July 27, 1905.
- DYKES, Jimmy, b. Philadelphia, Pa., Nov. 10, 1896.
- EVANS, Billy, b. Chicago, Ill., Feb. 10, 1884.
- FERRELL, Wes, b. Greensboro, N. C., Feb. 2, 1908.
- FLETCHER, Arthur, b. Collinsville, Ill., Jan. 5, 1885.
- FRICK, Ford C., Wawaka, Ind., Dec. 19, 1894.
- FRISCH, Frank F., b. New York City, Sept. 9, 1898.
- GEHRINGER, Charles, b. Fowlerville, Mich., May 11, 1903.
- GORDON, Joseph L. (Flash), b. Los Angeles, Calif., Feb. 18, 1915.
- GOWDY, Henry (Hank), b. Columbus, Ohio, Aug. 24, 1889.
- GREENBERG, Henry (Hank), b. New York City, Jan. 1, 1911.
- GRIFFITH, Clark C., b. Clear Creek, Mo., Nov. 20, 1869.
- GROVE, Robert M. (Lefty), b. Lonacom-ing, Mich., March 6, 1900.
- HARRIDGE, Will, b. Chicago, Ill., Oct. 16, 1886.
- HARTNETT, Charles L. (Gabby), b. Woonsocket, R. I., Dec. 20, 1900.
- HEILMANN, Harry, b. San Francisco, Calif., Aug. 3, 1894.
- HEYDLER, John A., b. Lafargeville, N. Y., July 10, 1869.
- HORNSBY, Rogers, b. Winters, Tex., Apr. 27, 1896.
- LAJOIE, Nap, b. Woonsocket, R. I., Sept. 5, 1875.
- LEWIS, G. E. (Duffy), b. San Francisco, Calif., Apr. 18, 1888.
- MC CARTHY, Joe, b. Philadelphia, Pa., Apr. 21, 1887.
- MC INNIS, John P. (Stuffy), b. Gloucester, Mass., Sept. 19, 1890.
- MC KECHNIE, William B., b. Wilkinsburg, Pa., Aug. 7, 1877.
- MACK, Connie, b. East Brookfield, Mass., Dec. 23, 1862.
- MARTIN, John L. (Pepper), b. Temple, Okla., Feb. 29, 1904.
- NEWHOUSE, Hal, b. Detroit, Mich., May 20, 1921.
- O'DOUL, Frank (Lefty), b. San Francisco, Calif., Mar. 4, 1897.
- O'NEILL, Steve, b. Minooka, Pa., July 6, 1892.
- OTT, Mel, b. Gretna, La., Mar. 2, 1909.
- PENNOCK, Herb, b. Kennett Square, Pa., Feb. 19, 1894.
- QUINN, J. A. (Robert), b. Columbus, Ohio, Feb. 18, 1870.
- RICKEY, Branch, b. Senecaville, Ohio, Dec. 20, 1881.
- ROWE, Lynwood T. (Schoolboy), b. Waco, Tex., Jan. 11, 1912.
- RUEL, Herold (Muddy), b. St. Louis, Mo., Feb. 20, 1896.
- RUFFING, Charles (Red), b. Granville, Ill., May 3, 1904.
- RUTH, George H. (Babe), b. Baltimore, Md., Feb. 7, 1894.
- SCHALK, Raymond W., b. Harvel, Ill., Aug. 12, 1892.
- SEARS, John W. (Ziggy), b. Central City, Ky., Jan. 10, 1895.
- SELKIRK, George, b. Huntsville, Ontario, Jan. 4, 1908.

SEWELL, Luke, b. Titus, Ala., Jan. 15, 1901.
 SISLER, George H., b. Manchester, Ohio, Mar. 24, 1893.
 SOUTHWORTH, Billy, b. Harvard, Nebr., Mar. 9, 1894.
 SPEAKER, Tris, b. Hubbard, Tex., Apr. 4, 1888.
 STENGEL, Casey, b. Kansas City, Mo., July 30, 1891.
 STREET, Gabby, b. Huntsville, Ala., Sept. 30, 1882.
 TERRY, Bill, b. Atlanta, Ga., Oct. 30, 1898.
 TINKER, Joe, b. Moskoda, Kans., July 27, 1880.
 TRAYNOR, Harold J. (Pie), b. Framingham, Mass., Nov. 11, 1899.
 VANCE, Arthur (Dazzy), b. Orient, Iowa, Mar. 4, 1893.
 VANDER MEER, Johnny, b. Prospect Park, N. J., Nov. 2, 1914.
 WAGNER, John P. (Hans), b. Mansfield, Pa., Feb. 24, 1874.
 WALKER, Fred (Dixie), b. Villa Rica, Ga., Sept. 24, 1910.
 WANER, Lloyd, b. Hurrah, Okla., March 16, 1906.
 WANER, Paul, b. Hurrah, Okla., Apr. 16, 1903.
 WEISS, George M., b. New Haven, Conn., June 23, 1895.
 WHEAT, Zack, b. Hamilton, Mo., May 23, 1888.
 WILLIAMS, Ted, b. San Diego, Calif., Oct. 30, 1918.
 WILSON, L. R. (Hack), b. Elwood City, Pa., Apr. 26, 1900.
 YAWKEY, Thomas, b. Detroit, Mich., Feb. 21, 1903.
 YOUNG, Cy, b. Gilmore, Ohio, Mar. 29, 1867.

BOXING

ANGOTT, Sammy, b. Washington, Pa., Jan. 17, 1915.
 ARMSTRONG, Henry, b. St. Louis, Mo., Dec. 12, 1912.
 BAER, Max, b. Omaha, Nebr., Feb. 11, 1909.
 BERLENBACH, Paul, b. New York, N. Y., Feb. 18, 1901.
 CANZONERI, Tony, b. New Orleans, La., Nov. 6, 1905.
 CARPENTIER, Georges, b. Lens, France, Jan. 12, 1894.
 COCHRANE, Freddie, b. Elizabeth, N. J., May 6, 1915.
 CONN, Billy, b. Pittsburgh, Pa., Oct. 8, 1917.
 DELANEY, Jack, b. St. Francis, Canada, Mar. 18, 1900.
 DEMPSEY, Jack, b. Manassa, Colo., June 24, 1894.

FIRPO, Luis Angel, b. Junia Province, Buenos Aires, Oct. 11, 1896.
 GRAZIANO, Rocky, b. New York City, June 7, 1922.
 JACK, Beau, b. Augusta, Ga., Apr. 1, 1921.
 JEFFRIES, James J., b. Carroll, Ohio, Apr. 15, 1875.
 KILBANE, Johnny, b. Cleveland, Ohio, Apr. 18, 1889.
 LANGFORD, Sam, b. Weymouth, N. Ireland, Feb. 12, 1880.
 LEONARD, Benny, b. New York, N. Y., Apr. 7, 1897.
 LESNEVICH, Gus, b. Cliffside Park, N. J., Feb. 22, 1915.
 LOUGHRAN, Tommy, b. Philadelphia, Pa., Nov. 29, 1902.
 LOUIS, Joe, b. Lexington, Ala., May 13, 1914.
 MCLARNIN, Jimmy, b. Dublin, Ireland, Dec. 17, 1905.
 MAURIELLO, Tami, b. New York, N. Y., Jan. 4, 1920.
 PETROLLE, Billy, b. Berwick, Pa., Jan. 10, 1905.
 RISKO, Johnny, b. Austria, Dec. 18, 1902.
 ROSENBLOOM, Max, b. New York, N. Y., Sept. 6, 1904.
 ROSS, Barney, b. New York City, Dec. 23, 1909.
 SHARKEY, Jack, b. Binghamton, N. Y., Oct. 6, 1902.
 SLATTERY, Jimmy, b. Buffalo, N. Y., Aug. 25, 1904.
 STEELE, Freddie, b. Tacoma, Wash., Dec. 18, 1912.
 TENDLER, Lew, b. Philadelphia, Pa., Sept. 28, 1898.
 TUNNEY, Gene, b. New York City, May 25, 1898.
 WILLARD, Jess, b. Pottawatomie, Kans., Dec. 29, 1883.
 ZALE, Tony, b. Gary, Ind., May 29, 1914.

FOOTBALL

BAUGH, Sammy, b. Temple, Tex., Mar. 17, 1914.
 BIBLE, Dana X., b. Jefferson City, Tenn., Oct. 8, 1891.
 BIERMAN, Bernard W., b. Springfield, Minn., Mar. 11, 1894.
 BLAIK, Earl H., b. Detroit, Mich., Feb. 15, 1897.
 CLARK, Earl (Dutch), b. Fowler, Colo., Oct. 11, 1906.
 CRISLER, Herbert O. (Fritz), b. Earlville, Ill., Jan. 12, 1899.
 DAVIDSON, Gar, b. New York, N. Y., Apr. 4, 1904.
 DOBIE, Gil, b. Hastings, Minn., Jan. 31, 1879.

MORRIS, Gus, b. Chippina Falls, Wis., July 2, 1892.

LAHERTY, Ray, b. Spokane, Wash., Sept. 1, 1904.

FRANGE, Harold (Red), b. Wheaton, Ill., June 13, 1904.

MALAS, George, b. Chicago, Ill., Feb. 2, 1895.

MARLOW, Dick, b. Philadelphia, Pa., Oct. 19, 1889.

MEIN, Mel, b. Reading, Calif., Aug. 22, 1909.

MUTSON, Don, b. Pine Bluff, Ark., Jan. 31, 1913.

MONES, L. McC. (Biff), b. Washington, D. C., Oct. 8, 1895.

MAYDEN, Elmer F., b. Davenport, Iowa, May 4, 1903.

MEB, Thomas J., b. Fairbault, Minn., Oct. 28, 1897.

MITTLE, Lou, b. Leominster, Mass., May 6, 1893.

MUCKMAN, Sid, b. Brooklyn, N. Y., Nov. 21, 1916.

MC LAUGHREY, DeOrmond (Tuss), b. Chicago, Ill., May 19, 1893.

MC MILLIN, Alvin N. (Bo), b. Prairie Hill, Tex., Jan. 12, 1899.

MADIGAN, Edward P. (Slip), b. Ottawa, Ill., Nov. 18, 1895.

MAGURSKI, Bronko, b. International Falls, Minn., Nov. 3, 1908.

MEEVERS, Ernie, b. Willow River, Minn., June 11, 1903.

MEYLAND, Robert, b. Greenville, Tex., Sept. 17, 1892.

MELPHANT, Elmer, b. Bloomfield, Ind., July 9, 1892.

SHAUGHNESSY, Clark D., b. St. Cloud, Minn., Mar. 6, 1892.

SPEARS, Dr. Clarence W., b. De Witt, Ark., July 24, 1894.

STAGG, A. Alonzo, b. West Orange, N. J., Aug. 16, 1862.

STEVENS, Mal, b. Stockton, Kans., Apr. 14, 1900.

STRONG, Ken, b. West Haven, Conn., Aug. 6, 1906.

STUHLREHER, Harry A., b. Massillon, Ohio, Oct. 14, 1901.

STYDAHAR, Joseph, b. Taylor, Pa., Mar. 16, 1912.

THOMAS, Frank, b. Nuncie, Ind., Nov. 15, 1898.

THORPE, Jim, b. near Prague, Okla., May 28, 1886.

VIDAL, Eugene, b. Madison, S. D., Apr. 13, 1895.

WADE, Wallace, b. Trenton, Tenn., June 15, 1892.

WALSH, Adam, b. Churchville, Iowa, Dec. 4, 1901.

WARNER, Glenn S., b. Springville, N. Y., Apr. 5, 1871.

GOLF

ARMOUR, Tommy, b. Edinburgh, Scotland, Sept. 24, 1895.

DUTRA, Olin, b. Monterey, Calif., Jan. 17, 1901.

EVANS, Charles (Chick), b. Indianapolis, Ind., July 18, 1890.

FARRELL, Johnny, b. White Plains, N. Y., Apr. 1, 1901.

HAGEN, Walter, b. Rochester, N. Y., Dec. 21, 1892.

HOGAN, Ben, b. Dublin, Tex., Aug. 13, 1912.

JONES, Bobby, b. Atlanta, Ga., Mar. 17, 1902.

LITTLE, W. Lawson, Jr., b. Newport, R. I., June 23, 1910.

MACFARLANE, Willie, b. Aberdeen, Scotland, June 29, 1890.

MC SPADEN, Harold (Jug), b. Rosedale, Kans., July 21, 1908.

MANERO, Tony, b. New York City, Apr. 4, 1905.

NELSON, Byron, b. Fort Worth, Tex., Feb. 4, 1912.

ORCUTT, Maureen, b. New York, N. Y., Apr. 1, 1907.

PICARD, Henry, b. Plymouth, Mass., Nov. 28, 1907.

REVOLTA, John, b. St. Louis, Mo., Apr. 5, 1911.

RUNYAN, Paul, b. Hot Springs, Ark., July 12, 1908.

SARAZEN, Gene, b. Harrison, N. Y., Feb. 27, 1901.

SMITH, Horton, b. Springfield, Ohio, May 22, 1908.

SMITH, Macdonald, b. Carnoustie, Scotland, Mar. 18, 1890.

SNEAD, Sam, b. Hot Springs, Va., May 27, 1912.

TURNESA, Joe, b. New York City, Jan. 31, 1901.

VARE, Glenna Collett, b. New Haven, Conn., June 20, 1903.

WOOD, Craig, b. Lake Placid, N. Y., Nov. 18, 1901.

TENNIS

ALLISON, Wilmer L., Jr., b. San Antonio, Tex., Dec. 8, 1904.

BETZ, Pauline, b. Dayton, Ohio, Aug. 6, 1919.

BUDGE, Donald J., b. Oakland, Calif., June 13, 1915.

COOKE, T. Elwood, b. Ogden, Utah, July 5, 1913.

JACOBS, Helen Hull, b. Globe, Ariz., Aug. 6, 1908.

KRAMER, John, b. Montebello, Calif., Aug. 1, 1921.

MARBLE, Alice I., b. Plumas County, Calif., Sept. 28, 1913.
 RIGGS, Robert L., b. Los Angeles, Calif., Feb. 25, 1918.
 ROARK, Helen Wills Moody, b. Centerville, Calif., Oct. 6, 1905.
 SHIELDS, Frank X., b. New York, N. Y., Nov. 18, 1910.
 TILDEN, William T. II, b. Philadelphia, Pa., Feb. 10, 1893.
 WILLIAMS, R. Norris II, b. Geneva, Switzerland, Jan. 29, 1891.
 WOOD, Sidney, b. Bridgeport, Conn., Nov. 1, 1911.

OTHER SPORTS

BEARD, Percy M., b. Hardinsburg, Ky., Jan. 26, 1908 (Track & Field).
 BINGHAM, William J., b. Norristown, Pa., Aug. 8, 1889 (Athl. Dir.).
 CANN, Howard, b. Bridgeport, Conn., Oct. 11, 1895 (Basketball).
 CARAS, Jimmy, b. Scranton, Pa., Dec. 17, 1908 (Billiards).
 COCHRAN, Welker, b. Manson, Iowa, Oct. 7, 1896 (Billiards).
 COFFEY, Jack, b. New York City, Jan. 28, 1888 (Athl. Dir.).
 CRANE, Irving, b. Livonia, N. Y., Nov. 13, 1913 (Billiards).
 CURTIS, Ann, b. Mar. 6, 1926 (Swimming).
 DEMAR, Clarence, b. Melrose, Mass., Mar. 20, 1888 (Marathon).
 ELLING, Emil Von, b. New York, N. Y., Mar. 30, 1883 (Track & Field).
 ENGEN, Alf, b. Nijondalen, Norway, May 15, 1909 (Skiing).
 FALCARO, Joe, b. Naples, Italy, Jan. 3, 1896 (Bowling).
 FERRIS, Dan, b. Pawling, N. Y., July 7, 1899 (Track & Field).

FISCHER, Lorraine, b. Chicago, Ill., Dec. 5, 1920 (Swimming).
 GREENLEAF, Ralph, b. Monmouth, Ill., Nov. 3, 1899 (Billiards).
 HENIE, Sonja, b. Norway, Apr. 8, 1913 (Figure Skating).
 HOLMAN, Nat, b. New York City, Oct. 19, 1896 (Basketball).
 HOPPE, Willie, b. Cornwall, N. Y., Oct. 11, 1887 (Billiards).
 HOWARD, Evelyn B., b. San Diego, Calif., May 1, 1920 (Badminton).
 KEOGH, Jerome R., b. Binghamton, N. Y., May 26, 1872 (Billiards).
 KILPATRICK, John Reed, b. New York, N. Y., June 15, 1889 (Executive).
 LASH, Don, b. Bluffton, Ind., Aug. 15, 1914 (Track & Field).
 LEWIS, Ed (Strangler), b. Nekoosa, Wis., Aug. 10, 1893 (Wrestling).
 LOVEDAY, Carl W., b. Knoxville, Tenn., Mar. 19, 1921 (Badminton).
 NURMI, Paavo, b. Finland, June 13, 1897 (Track & Field).
 PEDLEY, Eric, b. Los Angeles, Calif., Jan. 2, 1896 (Polo).
 REISELT, Otto, b. Philadelphia, Pa., Nov. 3, 1890 (Billiards).
 RICE, Grantland, b. Murfreesboro, Tenn., Nov. 1, 1880 (Writer).
 RUDOLPH, Erwin, b. Cleveland, Ohio, Dec. 30, 1893 (Billiards).
 SLOSSON, George F., b. Lawrence County, N. Y., Mar. 5, 1854 (Billiards).
 VANDERBILT, Harold S., b. Oakdale, N. Y., July 6, 1884 (Yachting).
 VARIPAPA, Andy, b. Italy, Mar. 31, 1894 (Bowling).
 WEBER, Jake, b. New York, N. Y., Jan. 7, 1880 (Trainer).

GOVERNMENT AND POLITICS

ACHESON, Dean Gooderham, b. Middletown, Conn., April 11, 1893.
 ALLEN, Florence, b. Salt Lake City, Utah, March 23, 1884.
 ALLEN, George E., b. Booneville, Miss., Feb. 29, 1896.
 ANDERSON, Clinton P., b. Centerville, S. Dak., Oct. 25, 1895.
 ARANHA, Oswaldo, b. Alegrete Rio Grande de Sul, Brazil, 1894.
 ARMOUR, Norman, b. Brighton, Eng., Oct. 14, 1887.
 ARNOLD, Thurman W., b. Laramie, Wyo., June 2, 1891.
 ATTLEE, Clement Richard, b. London, Eng., Jan. 3, 1883.

AVILA CAMACHO, Manuel b. Teziutlan, Puebla, Mex., April 24, 1897.
 AZAD, Abul Kalam, b. Mecca, Arabia, 1888.
 BALDOMIR, Alfredo, b. Montevideo, Uruguay, Aug. 27, 1884.
 BARKLEY, Alben William, b. Graves County, Ky., Nov. 24, 1877.
 BEAVERBROOK, (Lord) William Maxwell Aitken, b. Ontario, Canada, May 25, 1879.
 BENES, Eduard, b. Kozlany, Bohemia, May 26, 1884.
 BERLE, Adolf A., b. St. Louis, Mo., Jan. 24, 1865.
 BERNADOTTE, Count Foulke, b. Sweden, Jan. 2, 1895.

- EVERIDGE, Sir William Henry, b. Bengal, India, 1879.
- EVIN, Ernest, b. Winsford, Somersetshire, Eng., 1881.
- IDAULT, Georges, b. France, 1899.
- MIDDLE, Anthony J. Drexel, b. Philadelphia, Pa., Oct. 1, 1874.
- MIDDLE, Francis, b. Paris, France, May 9, 1886.
- JORNSSON, Sveinn, b. Iceland, Feb. 27, 1881.
- BLACK, Hugo L., b. Harlan, Clay County, Ala., Feb. 27, 1886.
- BLUM, Leon, b. Paris, France, April 9, 1872.
- BONNET, Henri, b. Châteaupansac, France, May 26, 1888.
- BOWERS, Claude G., b. Hamilton County, Ind., Nov. 20, 1878.
- BOWLES, Chester, b. Springfield, Mass., April 5, 1901.
- BRADEN, Spruille, b. Elkhorn, Mont., March 13, 1894.
- BROZOVICH (or Broz), Josip (Tito), b. Zagreb, Croatia, 1892.
- BURTON, Harold H., b. Jamaica Plain, Mass., June 22, 1888.
- BYRNES, James F., b. Charleston, S. Car., May 2, 1879.
- CADOGAN, Sir Alex, b. England, Nov. 25, 1884.
- CAFFERY, Jefferson, b. Lafayette, La., Dec. 1, 1886.
- CAPPER, Arthur, b. Garnett, Kans., July 14, 1865.
- CARDENAS, Lázaro, b. Jiquilpan, Michoacan, Mex., May 21, 1895.
- CHIANG KAI-SHEK, Madame, b. Shanghai, China, 1898.
- CHIANG KAI-SHEK (Generalissimo), b. Feng-Lwa, Chekiang, China, Oct. 31, 1887.
- CHRISTIAN X, b. nr. Copenhagen, Denmark, Sept. 26, 1870.
- CHURCHILL, Winston Leonard Spencer, b. Blenheim Palace, Oxfordshire, Eng., Nov. 8, 1874.
- CLARK, Tom, b. Dallas, Tex., Sept. 23, 1889.
- CONNALLY, Tom, b. McLennan County, Tex., Aug. 19, 1877.
- CRIPPS, Sir Stafford, b. England, April 24, 1889.
- CROWLEY, Leo T., b. Milton Junction, Wis., Aug. 15, 1889.
- CURTIN, John, b. Creswick, Victoria, Australia, Jan. 8, 1885.
- DAVIES, Joseph Edward, b. Watertown, Wis., Nov. 29, 1876.
- DE GAULLE, Charles, b. Lille, France, Nov. 22, 1890.
- DE VALERA, Eamon, b. New York, N. Y., Oct. 14, 1882.
- DEWEY, Thomas E., b. Owosso, Mich., March 24, 1902.
- DOUGLAS, William O., b. Maine, Minn., Oct. 16, 1898.
- DULLES, John Foster, b. Washington, D. C., Feb. 25, 1888.
- ECCLES, Marriner Stoddard, b. Logan, Utah, Sept. 9, 1890.
- EDEN, Robert Anthony, b. England, June 12, 1897.
- FARLEY, James A., b. Grassy Point, N. Y., May 30, 1888.
- FAROUK I, b. Cairo, Egypt, Feb. 11, 1920.
- FEISAL II, b. Iraq, 1935.
- FORRESTAL, James, b. Beacon, N. Y., Feb. 15, 1892.
- FRANCO, Francisco, b. El Ferrol, Galicia, Spain, 1892.
- FRANKFURTER, Felix, b. Vienna, Austria, Nov. 15, 1882.
- GANDHI, Mohandas Karamchand, b. Poindbandar, Western India, 1869.
- GEORGE II (of Greece), b. Latol, Greece, July 20, 1890.
- GEORGE VI (of England), b. Sandringham, England, Dec. 14, 1895.
- GRAU, San Martin, Ramon, b. Pinar del Rio, Cuba, Sept. 13, 1887.
- GREW, Joseph C., b. Boston, Mass., May 27, 1880.
- GROMYKO, Andrei A., b. Stayre Gromyki, Russia, July 5, 1909.
- GUFFEY, Joseph B., b. Westmoreland County, Pa., Dec. 29, 1875.
- GUSTAVUS V (of Sweden), b. Drottingham, Sweden, June 16, 1858.
- HAAKON VII (of Norway), b. Denmark, August 3, 1872.
- HAILE SELASSIE, b. Tafari Makonnen, Ethiopia, July 24, 1891.
- HALIFAX Viscount (Edward Frederick Lindley Wood), b. Eng., April 16, 1881.
- HAMBRO, Carl J., b. Bergen, Norway, Jan. 5, 1885.
- HANNEGAN, Robert E., b. St. Louis, Mo., June 30, 1903.
- HANSSON, Per Albin, b. Fösie, Skane, Sweden, Oct. 28, 1885.
- HATCH, Carl A., b. Kirwin, Kans., Nov. 27, 1889.
- HERRIOT, Eduard, b. France, July 5, 1872.
- HIROHITO, b. Japan, April 29, 1901.
- HOARE, Sir Samuel, b. England, Feb. 24, 1880.
- HODGSON, William Ray, b. Kingston, Victoria, Australia, May 22, 1892.
- HOOVER, Herbert, b. West Branch, Iowa, Aug. 10, 1874.

- HOOVER, John Edgar, b. Washington, D. C., Jan. 1, 1895.
- HORE-BELISHA, Leslie, b. England, Sept. 3, 1893.
- HURLEY, Patrick J., b. Choctaw Nation, Okla., Jan. 8, 1883.
- HU SHIH, b. Anhwei Province, China, Dec. 17, 1871.
- IBN SA'UD, b. Riyaoh, Ivejd, 1880.
- INONU, Ismet, b. Smyrna, Turkey, Sept. 24, 1884.
- JACKSON, Robert H., b. Spring Creek, Pa., Feb. 13, 1892.
- JINNAH, Mohammed Ali, b. Karachi, India, Dec. 25, 1876.
- KAGANOVICH, Lazar Moiseyevich, b. Kaban, Kiev, Russia, 1893.
- KILGORE, Harley Martin, b. Brown, W. Va., Jan. 11, 1893.
- KING, W. L. Mackenzie, b. Berlin, Ont., Canada, Dec. 17, 1874.
- KOO, Vi Kyuin Wellington, b. Shanghai, China, 1887.
- KRUG, Julius A., b. Madison, Wis., Nov. 23, 1907.
- KUNG, H. H., b. Shansi Province, China, 1881.
- LA FOLLETTE, Robert M. Jr., b. Madison, Wis., Feb. 6, 1895.
- LA GUARDIA, Fiorello H., b. New York, N. Y., Dec. 11, 1882.
- LANDON, Alfred M., b. West Middlesex, Pa., Sept. 9, 1887.
- LANGE, Oscar Richard, b. Tamaszow, Poland, July 27, 1904.
- LASKI, Harold Joseph, b. Manchester, Eng., June 30, 1893.
- LAWRENCE, Geoffrey, b. England, Dec. 2, 1880.
- LEHMAN, Herbert H., b. New York, N. Y., March 28, 1878.
- LENROOT, Katharine F., b. Superior, Wis., March 8, 1891.
- LIE, Trygve, b. Oslo, Norway, July 16, 1896.
- LILIENTHAL, David E., b. Morton, Ill., July 8, 1899.
- LITVINOV, Maxim, b. Bialystok, Russia, July 17, 1876.
- LOTHIAN, Marquis, b. London, Eng., April 18, 1882.
- MAISKY, Ivan Mikhailovich, b. Kriloff, Russia, 1884.
- MAKIN, Norman, b. New South Wales, Australia, March 31, 1889.
- MASARYK, Jan Garrigue, b. Prague, Czechoslovakia, Sept. 14, 1886.
- McKELLAR, Kenneth D., b. Richmond, Ala., Jan. 29, 1869.
- McNUTT, Paul V., b. Franklin, Ind., July 19, 1891.
- MEYER, Eugene, b. Los Angeles, Calif., Oct. 31, 1875.
- MICHAEL (Rumania), b. Rumania, Oct. 25, 1921.
- MIKOLAJCZYK, Stanislaw, b. Westphalia, Germany, July 18, 1901.
- MIKOYAN, Anastas Ivanovich, b. Tbilisi, Russia, 1895.
- MOLOTOV, Vyacheslav Mikhailovich, b. Russia, 1890.
- MORINIGO, Higinio, b. Paraguay, Jan. 11, 1887.
- MORRISON, Herbert L., b. Brixton, London, Eng., Jan. 3, 1888.
- MURPHY, Frank, b. Harbor Beach, Mich., April 13, 1890.
- MURPHY, Robert, b. Milwaukee, Wis., Oct. 28, 1894.
- NAJERA, Francisco Castillo, b. Durango, Mex., Nov. 25, 1886.
- NEHRU, Jawaharlal, b. Allahabad, India, Nov. 14, 1889.
- O'KELLY, Sean T., b. Eire, 1883.
- O'MAHONEY, Joseph C., b. Chelsea, Mass., Nov. 5, 1884.
- OSMENA, Sergio, b. Cebu, P. I., Sept. 9, 1878.
- PAASIKIVI, Juho Kusti, b. Tampere, Finland, Nov. 27, 1870.
- PADILLA, Ezequiel, b. Coyuca de Patalan, Mex., Dec. 31, 1890.
- PATTERSON, Robert P., b. Glens Falls, N. Y., Feb. 12, 1891.
- PERKINS, Frances, b. Boston, Mass., April 10, 1882.
- PERON, Juan Domingo, b. Southern Argentina, 1896.
- PORTER, Paul A., b. Joplin, Mo., Oct. 6, 1904.
- RAMIREZ, Pedro P., b. La Paz, Entre Rios, Argentina, January 1884.
- RAMSPECK, Robert, b. Decatur, Ga., Sept. 5, 1890.
- RAYBURN, Sam, b. Roane County, Tenn., Jan. 6, 1882.
- REECE, B. Carroll, b. Butler, Tenn., Dec. 22, 1889.
- REED, Stanley Foreman, b. Mason County, Ky., Dec. 31, 1884.
- RENNER, Karl, b. Dolne-Dunajovice, Moravia, Dec. 14, 1870.
- RIOS, Juan Antonio, b. Canete, Chile, Nov. 10, 1888.
- ROSENBERG, Anna M., b. Budapest, Hungary, July 19, 1900.
- ROXAS, Manuel, b. Capis, Panay, P. I., Jan. 1, 1892.
- RUML, Beardsley, b. Cedar Rapids, Iowa, Nov. 5, 1894.
- RUNCIMAN, Walter, b. South Shields, Eng., Nov. 19, 1870.

- MUTLEDGE, Wiley B. Jr., b. Cloverport, Ky., July 20, 1894.
- ALAZAR, Antonio de Oliveira, b. Santa Comba, Portugal, April 28, 1889.
- CHWELLENBACH, Lewis B., b. Superior, Wis., Sept. 20, 1894.
- HIPSTEAD, Henrik, b. Burbank Township, Minn., Jan. 8, 1881.
- HOERNIK, Nikolai Mikhailovich, b. Russia, 1888.
- IMON, John, b. England, Feb. 28, 1873.
- MUTS, Jan Christian, b. Capetown, So. Africa, May 24, 1870.
- NYDER, John W., b. Jonesboro, Ark., June 21, 1896.
- COONG, T. V., b. Shanghai, China, 1894.
- TALIN, Joseph, b. nr. Tiflis, Georgia, U. S. S. R., 1879.
- TASSEN, Harold Edward, b. West St. Paul, Minn., April 13, 1907.
- TEELMAN, John, b. Thornton, Ark., June 23, 1900.
- TEINHARDT, Laurence A., b. New York, N. Y., Oct. 6, 1892.
- TETTINIUS, Edward R. Jr., b. Chicago, Ill., Oct. 22, 1900.
- TRACHEY, Evelyn John St. Loe, b. Surrey, Eng., Oct. 21, 1901.
- UNER, Ramon Serrano, b. Spain, 1901.
- RAFT, Robert A., b. Cincinnati, Ohio, Sept. 8, 1889.
- TAYLOR, Myron, b. Lyons, N. Y., Jan. 18, 1874.
- THOMAS, Norman, b. Marion, Ohio, Nov. 20, 1884.
- THOREZ, Maurice, b. Noyelles-Godault, France, April 28, 1900.
- TRUJILLO-MOLINA, R. L., San Cristobal, Dominican Republic, Oct. 24, 1891.
- TRUMAN, Harry S., b. Lamar, Mo., May 8, 1884.
- TYDINGS, Millard E., b. Havre de Grace, Md., April 6, 1890.
- VANDENBERG, Arthur H., b. Grand Rapids, Mich., March 22, 1884.
- VAN MOOK, Hubertus J., b. Semarang, Java, 1894.
- VARGAS, Getulio Dornelles, b. São Borja, Rio Grande de Sul, Brazil, April 19, 1882.
- VINSON, Frederick Moore, b. Louisa, Ky., Jan. 22, 1890.
- WAGNER, Robert F., b. Nastetten Hesse-Nassau, Germany, June 8, 1877.
- WALLACE, Henry A., b. Adair County, Iowa, Oct. 7, 1888.
- WELLES, Sumner, b. New York, N. Y., Oct. 14, 1892.
- WICKARD, Claude Raymond, B. Delphi, Ind., Feb. 28, 1893.
- WILHELMINA (Netherlands), b. The Hague, Holland, Aug. 31, 1880.
- WINANT, John Gilbert, b. New York, N. Y., Feb. 23, 1889.
- WYATT, Wilson W., b. Louisville, Ky., Nov. 21, 1905.

LITERATURE

- ADAMIC, Louis, b. Blato, Dalmatia, Yugoslavia, Mar. 23, 1899.
- ADAMS, Franklin Pierce, b. Chicago, Ill., Nov. 15, 1881.
- ADAMS, James Truslow, b. Brooklyn, N. Y., Oct. 18, 1878.
- ADLER, Mortimer Jerome, b. New York, N. Y., Dec. 28, 1902.
- AIKEN, Conrad Potter, b. Savannah, Ga., June 2, 1886.
- AKINS, Zoë, b. Humansville, Mo., Oct. 30, 1886.
- ALDINGTON, Richard, b. Hampshire, Eng., 1892.
- ALLEN, Hervey, b. Pittsburgh, Pa., Dec. 8, 1889.
- ANDERSON, Maxwell, b. Atlantic, Pa., Dec. 15, 1888.
- ARLEN, Michael, b. Roustchouk, Bulgaria, Nov. 16, 1895—changed name from Dik-rau Kouyoumdjion.
- ASCH, Sholem (Shalom), b. Kutno, Poland, Nov. 1, 1880.
- ATHERTON, Gertrude, b. San Francisco, Calif., Oct. 30, 1857.
- AUDEN, Wystan Hugh, b. York, Eng., Feb. 21, 1907.
- BARNES, Margaret Ayer, b. Chicago, Ill., Apr. 8, 1886.
- BARRY, Philip, b. Rochester, N. Y., June 18, 1896.
- BAUM, Vicki, b. Vienna, Austria, Jan. 24, 1896.
- BEARD, Charles Austin, b. nr. Knightstown, Ind., Nov. 27, 1874.
- BEARD, Mary Ritter (Mrs. Charles A.), b. Indianapolis, Ind., Aug. 5, 1876.
- BEERBOHM, Max, b. London, Eng., Aug. 24, 1872.
- BEMELMANS, Ludwig, b. Meran, Tirol, Apr. 27, 1898.
- BENET, William Rose, b. Fort Hamilton, Brooklyn, N. Y., February 2, 1886.
- BERHMAN, Samuel N., b. Worcester, Mass., June 9, 1893.
- BOTTOME, Phyllis, b. Rochester, Eng., May 31, 1884.

- BOYLE, Kay, b. St. Paul, Minn., Feb. 19, 1943.
- BRADFORD, Roark, b. Lauderdale County, Tenn., Aug. 21, 1896.
- BROMFIELD, Louis, b. Mansfield, Ohio, Dec. 27, 1896.
- BROOKS, Van Wyck, b. Plainfield, N. J., Feb. 16, 1886.
- BUCK, Pearl, b. Hillsboro, W. Va., June 26, 1892.
- CABELL, James Branch, b. Richmond, Va., Apr. 14, 1879.
- CAIN, James M., b. Annapolis, Md., July 1, 1892.
- CALDWELL, Erskine, b. White Oak, Ga., Dec. 17, 1903.
- CANBY, Henry Seidel, b. Wilmington, Del., Sept. 6, 1878.
- CARROLL, Paul Vincent, b. Blackrock, Ireland, July 10, 1900.
- CATHER, Willa, b. Winchester, Va., Dec. 7, 1876.
- CHASE, Stuart, b. Somerworth, N. H., March 8, 1888.
- COFFIN, Robert Peter Tristram, b. Brunswick, Maine, March 18, 1892.
- COHEN, Octavus Roy, b. Charleston, S. C., June 26, 1891.
- COLUM, Padraic, b. Longford, Ireland, Dec. 8, 1881.
- CONNELLY, Marc, b. McKeesport, Pa., Dec. 13, 1890.
- COSTAIN, Thomas B., b. Brantford, Ontario, Canada, May 8, 1885.
- COWARD, Noel, b. London (Teddington), Eng., Dec. 16, 1899.
- CRONIN, Archibald Joseph, b. Cardross, Scotland, July 19, 1896.
- CROTHERS, Rachel, b. Bloomington, Ill., 1878.
- CROUSE, Russel, b. Findlay, Ohio, Feb. 20, 1893.
- CUMMINGS, Edward Estling, b. Cambridge, Mass., Oct. 14, 1894.
- DAVENPORT, Marcia, b. New York, N. Y., June 6, 1903.
- DAVIS, Elmer, b. Aurora, Ind., Jan. 13, 1890.
- DE LA MARE, Walter, b. Charlton, Eng., April 25, 1873.
- De VOTO, Bernard, b. Ogden, Utah, Jan. 11, 1897.
- DOS PASSOS, John Roderigo, b. Chicago, Ill., Jan. 14, 1896.
- DU MAURIER, Daphne, b. London, Eng., May 13, 1907.
- EDMAN, Irwin, b. New York, N. Y., Nov. 28, 1896.
- EDMONDS, Walter D., b. Boonville, N. Y., July 15, 1903.
- ELIOT, Thomas Stearns, b. St. Louis, Mo., Sept. 26, 1888.
- ERSKINE, John, b. New York, N. Y., Oct. 5, 1879.
- FARRELL, James T., b. Chicago, Ill., Feb. 27, 1904.
- FAST Howard, b. New York, N. Y., Nov. 11, 1914.
- FAULKNER, William, b. New Albany, Miss., Sept. 25, 1897.
- FERBER, Edna, b. Kalamazoo, Mich., Aug. 15, 1887.
- FISHER, Dorothy Canfield, b. Lawrence, Kans., Feb. 17, 1879.
- FISHER, Vardis, b. on Mormon outpost, Idaho, March 31, 1895.
- FLETCHER, John Gould, b. Little Rock, Ark., Jan. 3, 1886.
- FORSTER, Edward M., b. Eng., 1879.
- FRANK, Waldo, b. Long Branch, N. J., Aug. 25, 1889.
- FRANKEN, Rose (nee Lewin), b. Texas, 1891.
- FREEMAN, Douglas S., b. Lynchburg, Va., May 16, 1886.
- FROST, Robert, b. San Francisco, Calif., March 26, 1875.
- GALLICO, Paul William, b. New York City, N. Y., July 26, 1897.
- GIDE, André, b. Paris, France, Nov. 22, 1869.
- GOLDING, Louis, b. Manchester, Eng., Nov. 1895.
- GRAVES, Robert, b. London, Eng., July 26, 1895.
- GREEN, Paul, b. Lillington, N. C., March 17, 1894.
- HACKETT, Francis, b. Kilkenny, Ireland, Jan. 21, 1883.
- HAMSUN, Knut, b. Lom, Norway, Aug. 4, 1859.
- HART, Moss, b. New York, N. Y., Oct. 24, 1904.
- HECHT, Ben, b. New York, N. Y., Feb. 28, 1894.
- HELLMAN, Lillian, b. New Orleans, La., June 20, 1905.
- HEMINGWAY, Ernest, b. Oak Park, Ill., July 21, 1899.
- HERSEY, John, b. Tientsin, China, June 17, 1914.
- HILLYER, Robert, b. East Orange, N. J., June 3, 1895.
- HILTON, James, b. Leigh, Lancashire, Eng., Sept. 9, 1900.
- HOUSMAN, Laurence, b. Bromisgrove, Worcestershire, Eng., July 18, 1865.
- HUGHES, Hatcher, b. Polkville, N. C., Feb. 12, 1881.
- HURST, Fannie, b. Hamilton, Ohio, 1889.
- HUXLEY, Aldous Leonard, b. Godalming, Surrey, Eng., July 26, 1894.

- AMESON, Margaret Storm (Mrs. Guy Chapman), b. Whitby, Eng., 1897.
- EFFERS, Robinson, b. Pittsburgh, Pa., Jan. 10, 1887.
- JOHNSON, Josephine, b. Kirkwood, Md., June 20, 1910.
- JOSEPHSON, Matthew, b. Brooklyn, N. Y., Feb. 15, 1899.
- JANTOR, Mackinlay, b. Webster City, Iowa, Feb. 4, 1904.
- KAUFMAN, George S., b. Pittsburgh, Pa., Nov. 16, 1889.
- KENNEDY, Margaret, b. London, Eng., 1896.
- KEYES, Frances Parkinson, b. University of Va., July 21, 1885.
- KINGSLEY, Sidney, b. New York, N. Y., Oct. 18, 1906.
- KOMROFF, Manuel, b. New York, N. Y., Sept. 7, 1890.
- LA FARGE, Christopher, b. New York, N. Y., Dec. 10, 1897.
- LA FARGE, Oliver, b. New York, N. Y., Dec. 19, 1901.
- LAWSON, John Howard, b. New York, N. Y., Sept. 25, 1895.
- LEAF, Munro, b. Hamilton, N. D., Dec. 4, 1905.
- LEHMAN, Rosamund, b. London, N. Y., 1903.
- LEWIS, Sinclair, b. Sauk Center, Minn., Feb. 7, 1885.
- LEWISOHN, Ludwig, b. Berlin, Germany, May 30, 1882.
- LINDSAY, Howard, b. Waterford, N. Y., Mar. 29, 1889.
- LIN YUTANG, b. Changchow, Fukien Province, China, Oct. 10, 1885.
- LONSDALE, Frederick, b. Jersey, Channel Islands, Feb. 5, 1881.
- LUCE, Clare Booth, b. New York, N. Y., Apr. 10, 1903.
- MACARTHUR, Charles, b. Scranton, Pa., Nov. 5, 1895.
- MACLEISH, Archibald, b. Glencoe, Ill., May 7, 1892.
- MADARIAGA, Salvador De, b. Corunna, Spain, July 23, 1886.
- MALRAUX, André, b. Paris, France, Nov. 3, 1895.
- MANN, Thomas, b. Lübeck, Germany, June 6, 1875.
- MARITAIN, Jacques, b. Paris, France, Nov. 18, 1882.
- MARQUAND, John P., Wilmington, Del., Nov. 10, 1893.
- MASEFIELD, John, b. Ledbury, Eng., June 1, 1878.
- MASTERS, Edgar Lee, b. Garnett, Kansas, Aug. 23, 1869.
- MAUGHAM, William Somerset, b. Paris, France, Jan. 25, 1874.
- MAUROIS, André, b. Elbeuf, Normandy, France, July 26, 1885.
- MENCKEN, Henry Louis, b. Baltimore, Md., Sept. 12, 1880.
- MILLAY, Edna St. Vincent, b. Rockland, Maine, Feb. 22, 1892.
- MILNE, Alan Alexander, b. London, Eng., Jan. 18, 1882.
- MISTRAL, Gabriela, b. Vicuña, Chile, Apr. 7, 1889.
- MITCHELL, Margaret, b. Atlanta, Ga.
- MOLNAR, Ferenc, b. Budapest, Hungary, Jan. 12, 1878.
- MORGAN, Charles, b. Kent, Eng., Jan. 22, 1894.
- MORLEY, Christopher Darlington, b. Haverford, Pa., May 5, 1890.
- NASH, Ogden Frederic, b. Rye, N. Y., Aug. 19, 1902.
- NATHAN, George Jean, b. Ft. Wayne, Ind., Feb. 14, 1882.
- NATHAN, Robert, b. New York, N. Y., Jan. 2, 1894.
- NORRIS, Kathleen, b. San Francisco, Calif., July 16, 1880.
- NOYES, Alfred, b. Staffordshire, Eng., Sept. 16, 1880.
- O'CASEY, Sean, b. Dublin, Ireland, 1881.
- ODETS, Clifford, b. Philadelphia, Pa., July 18, 1906.
- O'FLAHERTY, Liam, b. Baran Islands, Ireland, 1897.
- O'NEILL, Eugene Gladstone, b. New York, N. Y., Oct. 16, 1888.
- OSTENSO, Martha, b. Bergen, Norway, Sept. 17, 1900.
- PARKER, Dorothy R., b. West End, N. J., Aug. 22, 1893.
- PAUL, Elliot Harold, b. Malden, Mass., Feb. 11, 1891.
- PEATIE, Donald Culross, b. Chicago, Ill., June 21, 1898.
- PETERKIN, (Mrs.) Julia Mood, b. Laurence County, S. C., Oct. 31, 1880.
- PORTER, Katherine Anne, b. Indian Creek, Texas, May 15, 1894.
- PRIESTLEY, John B., b. Yorkshire, Eng., Sept. 13, 1894.
- PROKOSCH, Frederic, b. Madison, Wis., May 17, 1908.
- RANSOM, John Crowe, b. Pulaski, Tenn., April 30, 1888.
- RAWLINGS, Marjorie Kinnan, b. Washington, D. C., Aug. 8, 1896.
- REMARQUE, Erich Maria, b. Westphalia, Germany, June 22, 1898.
- RICE, Elmer (Elmer Reizenstein), b. New York, N. Y., Sept. 28, 1892.
- RICHARDS, Ivor Armstrong, b. Stondbach, Eng., Feb. 26, 1893.
- ROBERTS, Kenneth Lewis, b. Kennebush, Maine, Dec. 8, 1885.
- ROMAINS, Jules, b. St. Julien Chaptell, Velay, France, Aug. 26, 1885.
- RUNYON, Damon, b. Manhattan, Kansas, Oct. 4, 1884.

- RUSSELL, Bertrand, b. Trelleck, Eng., May 18, 1872.
- SACKVILLE-WEST, Victoria Mary, b. Knole Castle, Sevenoaks, Eng., Mar. 9, 1892.
- SANDBURG, Carl, b. Galesburg, Ill., Jan. 6, 1878.
- SANTAYANA, George, b. Madrid, Spain, Dec. 16, 1863.
- SAROYAN, William, b. Fresno, Calif., Aug. 31, 1908.
- SHAW, George Bernard, b. Dublin, Ireland, July 26, 1856.
- SHEEAN, Vincent, b. Christian Co., Ill., Dec. 5, 1899.
- SHERIFF, Robert Cedric, b. Kingston-on-Thames, Eng., June 6, 1896.
- SHERWOOD, Robert Emmet, b. New Rochelle, N. Y., April 4, 1896.
- SINCLAIR, Upton Beall, b. Baltimore, Md., Sept. 20, 1878.
- SMITH, Betty, b. Brooklyn, N. Y., Dec. 15, 1904.
- SMITH, Lillian, b. Jasper, Florida, 1897.
- STALLINGS, Laurence, b. Macon, Ga., Nov. 25, 1894.
- STEINBECK, John Ernst, b. Salinas, Calif., Feb. 27, 1902.
- STEPHENS, James, b. Dublin, Ireland, Feb. 1882.
- STEWART, Donald Ogden, b. Columbus, Ohio, Nov. 30, 1894.
- STONE, Irving, b. San Francisco, Calif., July 14, 1903.
- STONG, Philip Duffield, b. Keosauqua, Iowa, Jan. 27, 1899.
- STREET, Julian, b. Chicago, Ill., Apr. 12, 1879.
- STRIBLING, Thomas Sigismund, b. Clifton, Tenn., Mar. 4, 1881.
- STRONG, Leonard Alfred George, b. nr. Plymouth, Eng., March 8, 1896.
- STRUTHER, Jan, b. London, Eng., June 6, 1901.
- STUART, Jesse, b. W-Hollow, Kentucky, Aug. 8, 1907.
- SUCKOW, Ruth, b. Howarden, Iowa, Aug. 6, 1892.
- TAGGARD, Genevieve, b. Waltsburg, Wash., Nov. 28, 1894.
- TATE, Allen, b. Winchester, Kentucky, Nov. 19, 1899.
- THOMPSON, Sylvia, b. Sept. 4, 1902.
- THURBER, James, b. Columbus, Ohio, Dec. 8, 1894.
- TULLY, Jim, b. nr. St. Marys, Ohio, June 3, 1891.
- UNDSET, Sigrid, b. Kallundborg, Denmark, May 20, 1882.
- UNTERMEYER, Louis, b. New York, N. Y., Oct. 1, 1885.
- VAN DOREN, Carl, b. Hope, Ill., Sept. 10, 1885.
- VAN DOREN, Mark, b. Hope, Ill., June 13, 1894.
- VAN DRUTEN, John, b. London, Eng., June 1, 1901.
- WARNER, Sylvia Townsend, b. Harrow-on-the-Idill, Eng., Dec. 1893.
- WAUGH, Alec, b. Hampstead, Eng., July 8, 1898.
- WAUGH, Evelyn Arthur St. John, b. 1903.
- WEIDMAN, Jerome, b. New York, N. Y., Aug. 4, 1913.
- WESCOTT, Glenway, b. Kewaskan, Wis., April 11, 1901.
- WEST, Rebecca, b. Edinburgh, Scotland, Dec. 25, 1892.
- WHITE, Elwyn Brooks, b. Mt. Vernon, N. Y., July 11, 1899.
- WILDER, Thornton N., b. Madison, Wis., Apr. 17, 1897.
- WILLIAMS, Ben Ames, b. Macon, Miss., March 7, 1889.
- WILLIAMS, William Carlos, b. Rutherford Park, N. J., Sept. 17, 1883.
- WILSON, Edmund, b. Red Bank, N. J., May 8, 1895.
- WILSON, Margaret, b. Traer, Iowa, Jan. 16, 1882.
- WINWAR, Frances (Francesca Vinceguerra), b. Taormina, Ill., May 3, 1900.
- WOODWARD, William E., b. Lexington County, B. C., Oct. 2, 1874.
- WRIGHT, Richard, b. nr. Natchez, Miss., Sept. 4, 1908.
- WYLIE, Philip Gordon, b. Beverly, Mass., May 12, 1902.
- ZWEIG, Arnold, b. Grosz-glogan, Austria, Nov. 10, 1887.

SCIENCE

- ABBOT, Charles G., b. Wilton, N. H., May 31, 1872.
- ALEXANDERSON, Ernst F. W., b. Upsala, Sweden, Jan. 25, 1878.
- ANDERSON, Carl D., b. New York, N. Y., Sept. 3, 1905.
- ANDREWS, Roy Chapman, b. Beloit, Wis., Jan. 26, 1884.
- ARMSTRONG, Edwin Howard, b. New York, N. Y., Dec. 18, 1890.
- ASTON, Francis William, b. Birmingham, Eng., Sept. 1, 1877.
- BAADE, Walter, b. Schroetinghausen, Germany, March 24, 1893.
- BANTA, Arthur N., b. Greenwood, Indiana, Dec. 31, 1877.
- BEEBE, William, b. Brooklyn, N. Y., June 29, 1877.
- BERGIUS, Friedrich, b. Goldschmieden, Silesia, Oct. 11, 1884.

- BLODGETT, Katharine Burr, b. Schenectady, N. Y., Jan. 10, 1898.
- BOHR, Niels, b. Copenhagen, Denmark, Oct. 7, 1885.
- BRAGG, Sir William, b. Adelaide, South Australia, March 31, 1890.
- BUSH, Vannevar, b. Everett, Mass., March 11, 1890.
- BYRD, Richard E., b. Winchester, Va., Oct. 25, 1888.
- CHADWICK, Sir James, b. Manchester, Eng., Oct. 20, 1981.
- COLE, Rufus, b. Rowsburg, Ohio, April 30, 1872.
- COMPTON, Arthur Holly, b. Wooster, Ohio, Sept. 10, 1892.
- COMPTON, Karl T., b. Wooster, Ohio, Sept. 14, 1887.
- COOLIDGE, William D., b. Hudson, Mass., Oct. 23, 1873.
- COTTRELL, Frederick G., b. Oakland, Calif., Jan. 10, 1877.
- DAVISSON, Clinton J., b. Bloomington, Ill., Oct. 22, 1881.
- DEBROGLIE, Prince Louis Victor, b. Dieppe, France, Aug. 15, 1892.
- DE KRUIF, Paul, b. Zeeland, Mich., March 2, 1890.
- DIRAC, Paul Adrien, b. Bristol, England, Aug. 8, 1902.
- DOISY, Edward A., b. Hume, Ill., Nov. 13, 1893.
- DUNNING, John R., b. Shelby, Nebr., Sept. 24, 1907.
- EINSTEIN, Albert, b. Ulm, Germany, March 14, 1879.
- ELLSWORTH, Lincoln, b. Chicago, Ill., May 12, 1880.
- ERLANGER, Joseph, b. San Francisco, Calif., Jan. 5, 1874.
- EVANS, Herbert McLean, b. Modesto, Calif., Sept. 23, 1882.
- FERMI, Enrico, b. Rome, Italy, Sept. 29, 1901.
- FLEMING, Sir Alexander, b. Lochfield, Darvel, England.
- HAHN, Otto, b. Frankfort-am-Main, Germany, Mar. 8, 1879.
- HALDANE, J. B. S., b. Oxford, Eng., Nov. 5, 1892.
- HEISENBERG, Werner, b. Würzburg, Germany, Dec. 5, 1912.
- HEISER, Victor G., b. Pennsylvania, 1873.
- HOGGEN, Lancelot, b. Southsea, Eng., Dec. 9, 1895.
- HOOTON, Earnest Albert, b. Clemansville, Wis., Nov. 20, 1887.
- HUBBARD, Bernard (Rosicrans) Father, b. San Francisco, Calif., Nov. 24, 1888.
- HUBBLE, Edwin P., b. Marshfield, Mo., Nov. 20, 1899.
- HUNTINGTON, Ellsworth, b. Galesburg, Ill., Sept. 16, 1876.
- HUXLEY, Julian, b. England, June 22, 1887.
- JENNINGS, Herbert S., b. Tonica, Ill., April 8, 1868.
- JOLIOT, Jean Frederic, b. Paris, France, March 19, 1900.
- JOLIOT-CURIE, Irene, b. France, 1896.
- JUNG, Carl Gustav, b. Basel, Switzerland, July 26, 1875.
- KAPITZA, Peter J., b. Kronstadt, Russia, June 26, 1894.
- KETTERING, Charles F., b. nr. Loudonville, Ohio, Aug. 29, 1876.
- LANGMUIR, Irving, b. Brooklyn, N. Y., Jan. 31, 1881.
- LAWRENCE, Ernest Orlando, b. Canton, S. D., Aug. 8, 1901.
- MACNIDER, William de Berniere, b. Chapel Hill, N. C., June 25, 1881.
- MAYO, Charles William, b. Rochester, Minn., July 28, 1898.
- MEITNER, Lise, b. Vienna, Austria, Nov. 7, 1878.
- MENNINGER, William Claire, b. Topeka, Kans., Oct. 15, 1899.
- MILLIKAN, Robert Andrews, b. Morrison, Ill., March 22, 1868.
- MINOT, George R., b. Boston, Mass., Dec. 2, 1885.
- MURPHY, William P., b. Stoughton, Wis., Feb. 6, 1892.
- NORDEN, Carl Lukas, b. Semarang, Java, April 23, 1880.
- OPPENHEIMER, J. Robert, b. New York, N. Y., April 22, 1904.
- PAINTER, Theophilus S., b. Salem, Va., Aug. 22, 1889.
- PARRAN, Thomas, Jr., St. Leonard, Md., Sept. 28, 1892.
- PICCARD, August, b. Basle, Switzerland, Jan. 28, 1884.
- RABI, Isadore I., b. Austria, July 29, 1898.
- RUSSELL, Henry Norris, b. Oyster Bay, N. Y., Oct. 25, 1877.
- SABIN, Florence R., b. Central City, Colo., Nov. 9, 1871.
- SHAPLEY, Harlow, b. Nashville, Mo., Nov. 2, 1885.
- SIEGBAHN, Karl Manne Georg, b. Orebro, Sweden, Dec. 3, 1886.
- STEENBOCK, Harry, b. Charlestown, Wis., April 12, 1887.
- STEFANSSON, Villyalmur, b. Ames, Manitoba, Canada, Nov. 3, 1879.
- TOLMAN, Richard C., b. West Newton, Mass., March 4, 1881.
- UREY, Harold Clayton, b. Walkerton, Ind., April 29, 1893.
- WAKSMAN, Selman, b. Priluka, Russia, July 2, 1884.
- WHIPPLE, George H., b. Ashland, N. H., Aug. 28, 1878.
- ZWORYKIN, Vladimir, b. Russia, June 30, 1889.

Leading National Associations and Societies in the United States

- ACADEMY OF POLITICAL SCIENCE.** (1880) 7000-7500; 409 Fayerweather Hall, Columbia Univ., New York City; Ethel Warner, director.
- ACCOUNTANTS, AMERICAN INSTITUTE OF.** (1887) 13 East 41st Street, New York 17; 5,000; John L. Carey, sec.
- ADULT EDUCATION, AMERICAN ASS'N. FOR.** (1926) 525 West 120th St., New York 27; 1,100; dir., Morse A. Cartwright.
- ADVERTISING AGENCIES, AMERICAN ASS'N. OF** (1926) 420 Lexington Avenue.
- AERONAUTICAL SCIENCES, INSTITUTE OF THE.** (1932) pres., Hugh L. Dryden; 1505 RCA Bldg. W., Rockefeller Plaza, New York City.
- AMERICAN ACADEMY OF POLITICAL & SOCIAL SCIENCE.** (1889) 8,700; 3457 Walnut St., Philadelphia; sec'y., J. P. Liechtenberger.
- AMERICAN ASTRONOMICAL SOCIETY.** (1899) 630; Washburn Observatory, Madison, Wis.; sec'y., Dean B. McLaughlin.
- AMERICAN BAR ASSOCIATION.** (1878) 30,000; 1140 N. Dearborn St., Chicago; sec'y., Mrs. Olive G. Ricker.
- AMERICAN COLLEGES, ASS'N. OF.** (1914) 564 Colleges—4 yr. liberal arts; 19 W. 44th St., N. Y. C., New York; exec. dir., Guy E. Shavely.
- AMERICAN LEGION.** (1919) 777 North Meridian Street, Indianapolis, Ind.; 1,417,446; national commander, Paul W. Griffith.
- AMERICAN SOCIETY OF COMPOSERS, AUTHORS, AND PUBLISHERS.** (1914) 1500; 30 Rockefeller Plaza, New York; pres., Gene Buck.
- AMERICAN VETERAN'S COMMITTEE.** 554 Madison Ave., New York 22; exec. head, Charles Bolte.
- AMERICAN WOMEN'S ASSOCIATION.** (1922) 353 E. 57th St., New York City; 1,000; sec., Miss Thalia Newton Brown.
- ARCHITECTS, AMERICAN INSTITUTE OF.** (1857) 1741 New York Ave., N. W., Washington 6, D. C.; 3,761; sec., Chas. Ingham.
- ARTS AND LETTERS, AMERICAN ACADEMY OF.** (1904) 633 West 155th St., New York 32; limited to 50; pres., Dr. Walter Damrosch.
- ARTS AND LETTERS, NATIONAL INSTITUTE OF.** (1898) 633 W. 155th St., New York 32; 250; sec., Henry Seibel Canby.
- ARTS AND SCIENCES, AMERICAN ACADEMY OF.** (1780) 26 Newbury St., Boston 16; corr. sec., Prof. Abbott P. Usher.
- AUDUBON SOCIETY, NATIONAL.** (1905) 1006 Fifth Ave., New York 28; 50,000; exec. dir., John H. Baker.
- AUTHORS LEAGUE OF AMERICA.** (1912) 6 East 39th St., New York 16, N. Y.; exec. sec., Louise M. Silcox.
- BACTERIOLOGISTS, SOCIETY OF AMERICAN.** (1899) 1335 H St., N. W., Washington 5, D. C.; 2,403; sec., Dr. Leland W. Parr.
- BANKERS ASSOCIATION, AMERICAN.** (1875) 22 East 40th St., N. Y. 16; 15,316; exec. mgr., Harold Stonier.
- BANKERS ASSOCIATION OF AMERICA, INVESTMENT.** (1912) 33 S. Clark St., Chicago 3; 628; exec. sec. treas., Alden H. Little.
- BAPTIST HOME MISSION SOCIETY, AMERICAN.** (1832) 212 Fifth Avenue, New York 10, N. Y.
- BAPTIST YOUTH FELLOWSHIP.** Philadelphia; 400,000; gen. sec., Dr. Oliver deWolf Cummings.
- BAR ASSOCIATION, FEDERAL.** (1920) Columbian Bldg., 416 Fifth St., N. W., Washington 1, D. C.; 1,600; sec., William G. Hamilton.
- BIBLE SOCIETY, AMERICAN.** (1816) Park Ave. and 57th St., New York 22; 15,000; sec., Dr. Eric M. North.
- BIG BROTHER MOVEMENT.** 315 Fourth Ave., New York 10; gen. sec., Joseph H. McCoy.
- B'NAI B'RITH.** (1843) 1003 K St., N. W., Washington 1, D. C.; 229,000; sec., Maurice Bisgyer.
- BOOKSELLERS ASSOCIATION, AMERICAN.** (1900) 35 East 20th St., New York.
- BOY'S CLUB OF AMERICA, INC.** 381 Fourth Ave., New York 16, N. Y.; exec. dir., David W. Armstrong.
- BOY SCOUTS OF AMERICA.** (1910) 2 Park Ave., New York 16, N. Y.; 1,695,555; chief scout exec., Dr. Elbert K. Fretwell.
- B'RITH ABRAHAM, INDEPENDENT ORDER.** (1887) 37 Seventh St., New York 3; 58,000; gr. sec., Abraham H. Hollander.
- CAMP FIRE GIRLS, INC.** (1912) 88 Lexington Ave., New York 16; 320,000; national exec., Martha F. Allen.
- CANCER SOCIETY, FOR COMBATING OF, AMERICAN.** (1913) 350 Madison Ave., New York 17, N. Y.; 600; pres., Dr. Herman C. Pitts.
- CATHOLIC MEN, NATIONAL COUNCIL OF.** (1920) 1312 Massachusetts Ave., N. W., Washington, D. C.; 2,316; exec. sec., Edward J. Heffron.
- CATHOLIC WELFARE CONFERENCE, NATIONAL.** (1919) 1312 Massachusetts Ave., N. W., Washington 5, D. C.; gen. sec., Rev. Msgr. Howard J. Carroll.
- CATHOLIC WOMEN, NATIONAL COUNCIL OF.** (1920) 1312 Massachusetts Ave., N. W., Washington 5, D. C.; 5,000,000; exec. sec., Agnes C. Kegan.
- CHAMBER OF COMMERCE OF THE UNITED STATES.** (1912) 1615 H St., N. W., Washington, D. C.; 1,928 organizations; gen. mgr., Ralph Bradford.
- CHEMICAL SOCIETY, AMERICAN.** (1876) 1155-16th St., N. W., Washington 16, D. C.; 32,184; sec., Dr. Charles L. Parsons.
- CHEMISTS, AMERICAN INSTITUTE OF.** (1933) 60 East 42nd St., New York 17; 2,000; sec., Howard S. Heiman.

- CHRISTIAN ENDEAVOR, INT'L. (Also World) SOCIETY OF. (1885) 41 Mt. Vernon St., Boston 8; 2,000,000; exec. sec., Carroll M. Wright.
- CHRISTIANS AND JEWS, NATIONAL CONFERENCE OF. (1928) 24,000; 381 Fourth Ave., New York 16; pres., Everett R. Clinchy.
- CHURCHES OF CHRIST IN AMERICA, FEDERAL COUNCIL OF. (1908) 297 Fourth Ave., New York 10, N. Y.; gen. sec., Rev. Samuel McCrea Cavert.
- CIVIL LIBERTIES UNION, AMERICAN. (1920) 170 Fifth Ave., New York 10; 6,000; dir., Roger N. Baldwin.
- COLONIAL DAMES OF AMERICA, NAT'L. SOCIETY OF. (1891) Dumbarton House 2715 Q St., N. W., Washington 7, D. C.; 12,000; sec., Mrs. Charles Willcox.
- DAUGHTERS OF THE AMERICAN REVOLUTION, NATIONAL SOCIETY. (1890) 145,000 in 2,569 chapters; Miss Katherine Mathies, sec. gen., 1720 D St., N. W., Washington 6, D. C.
- DAUGHTERS OF THE CINCINNATI. (1894) Morristown, N. J.; 285; sec., Mrs. Thomas Turner Cooks.
- DAUGHTERS OF THE CONFEDERACY, UNITED. 5330 Pershing Ave., St. Louis, Mo.
- DAUGHTERS OF THE REVOLUTION, NATIONAL SOCIETY. (1891) Graybar Bldg., New York City; 2,500; sec., Mrs. Anthony Conrad Elser.
- DEMOLAY, ORDER OF. (1919) 201 E. Armour Blvd., Kansas City 2, Mo; 1,600,000; founder and sec., Frank W. Land.
- DENTAL ASSOCIATION, AMERICAN. (1859) 212 E. Superior St., Chicago 11; 55,000; sec., Dr. Harry B. Pinney.
- DIETETIC ASS'N., THE AMERICAN. (1917) 3,800; 185 N. Wabash Ave., Chicago; pres., Frances MacKinnon.
- EAGLES, FRATERNAL ORDER OF. (1898) Kirkwood Bldg., 18th and McGee Sts., Kansas City 8, Missouri; 925,000; gr. sec., John A. Abel.
- EASTERN STAR, ORDER OF THE GRAND CHAPTER. (1896) Masonic Temple, 13th and New York Ave., N. W., Washington 5, D. C.; 10,009; gr. sec., Mrs. Rose A. Yost.
- EDUCATION ASSOCIATION, NATIONAL. (1857) 1201-16th St., N. W., Washington 6, D. C.; 217,943; sec., Willard E. Givens.
- ELKS, BENEVOLENT & PROTECTIVE ORDER OF. (1868) Elks National Memorial Headquarters Bldg., 2750 Lake View Ave., Chicago 14, Ill.; 500,000; gr. sec., J. E. Masters.
- ENGINEERS, AMERICAN ASSOCIATION OF. (1915) 8 S. Michigan Ave., Chicago.
- ENGINEERS, AMERICAN INSTITUTE OF, CHEMICAL. 50 East 41st St., N. Y. C.
- ENGINEERS, AMERICAN INSTITUTE OF CONSULTING. 75 West St., N. Y. C.
- ENGINEERS, AMERICAN INSTITUTE OF ELECTRICAL. (1884) 33 West 39th St., New York 18.
- ENGINEERS, AMERICAN INSTITUTE OF MINING AND METALLURGICAL. (1871) 29 West 39th St., New York 18.
- ENGINEERS, AMERICAN SOCIETY OF CIVIL. (1852) 33 West 39th St., New York 18, N. Y.
- ENGINEERS, AMERICAN SOCIETY OF HEATING AND VENTILATING. (1895) 51 Madison Ave., New York 10, N. Y.
- ENGINEERS, AMERICAN SOCIETY OF MECHANICAL. (1880) 29 W. 39th St., New York 18, N. Y.
- ENGINEERS, INSTITUTE OF RADIO. (1912) 330 West 42nd St., New York 18.
- ENGINEERS, SOCIETY OF AUTOMOTIVE. (1905) 29 West 39th St., New York 13.
- FARM BUREAU FEDERATION, AMERICAN. (1919) 58 East Washington St., Chicago.
- FLAG ASSOCIATION, UNITED STATES. (1924) 923-15th St., N. W., Washington.
- FOREIGN MISSIONS CONFERENCE OF NORTH AMERICA. (1893) 156 Fifth Ave., New York; Dr. Wyne C. Fairchild.
- FOREIGN POLICY ASSOCIATION. (1919) 22 East 38th St., New York 16, N. Y.; 30,500; sec., Dorothy F. Leet.
- FORESTERS, SOCIETY OF AMERICA. (1900) 825 Mills Bldg., 17th St., & Pa. Ave., Washington 6, D. C.
- FORESTRY ASSOCIATION, AMERICAN. (1875) 919-17th St., N. W., Washington 6, D. C.; 13,000; exec. sec., Ovid Butler.
- FOUR FREEDOMS FOUNDATION. 247 Park Ave., New York, N. Y.
- FOUR H CLUBS. U. S. Dept. of Agriculture, Extension Service, Washington 25, D. C.
- FRIENDS GENERAL CONFERENCE. (1900) 1515 Cherry St., Philadelphia 2, Pa.
- GARDEN CLUB OF AMERICA. (1913) 8,000; 598 Madison Ave., New York; sec., Mrs. Barent Leferts.
- GEOGRAPHIC SOCIETY, NATIONAL. (1888) 1146 16th St., N. W., Washington 6, D. C.; 1,000,000; pres., Dr. Gilbert Grosvenor.
- GIDEONS, THE. (1899) 202 So. State St., Chicago, Ill.; 18,000; sec., H. F. Dowar.
- GIRL SCOUTS. (1912) 155 East 44th St., New York 17, N. Y.; 944,894; sec., Mrs. Dudley H. Mills.
- GOLD STAR MOTHERS, AMERICAN. (1928) New Colonial Hotel, Washington, D. C.; 6,000; nat'l. corr. sec., Mrs. Isable Adams, 4516 Locust St., Philadelphia, Pa.
- GRAND ARMY OF THE REPUBLIC. (est. April 6, 1866) Commander, Isaac W. Sharp, Warsaw, Indiana.
- GYNEOLOGICAL SOCIETY, AMERICAN. (1876) 842 Park Ave., New York 21, N. Y.; 132; sec., Dr. Howard C. Taylor, Jr.
- HADASSAH. (Women's Zionist Organization of America) (1912) 1819 Broadway, New York 23, N. Y.; 135,000; exec. sec., Miss Jeannette N. Leibel.
- HEBREW CONGREGATIONS, UNION OF AMERICAN. (1873) 32 W. 6th St., Cincinnati 2, Ohio; adm. sec., Rabbi Louis I. Egelson.

- HIBERNIANS IN AMERICA, ANCIENT ORDER OF.** (1836) 1648 Westmont Ave., Pittsburgh, Pa.; sec., Leo Kelly.
- HISTORICAL ASSOCIATION, AMERICAN.** (1884) Study Rm. 274, Library of Congress Annex, Washington 25, D. C.; 3,585; exec. sec., Guy Stanton Ford.
- HOME MISSIONS COUNCIL OF NORTH AMERICA.** (1908) 297 Fourth Ave., New York 10, N. Y.; exec. secretaries, Miss Edith E. Lowry & Mark A. Dawber.
- HORTICULTURAL SOCIETY, THE AMERICAN.** (1922) 821 Washington Loan & Trust Bldg., Washington 4, D. C.; 1,200; sec., Dr. V. T. Stoutmeyer.
- HOSPITAL ASSOCIATION, AMERICAN.** (1899) 18 E. Division St., Chicago 10, Ill.; 5,470; exec. sec., George Bugbee.
- HUGENOT SOCIETY OF AMERICA.** (1883) 122 East 58th St., New York, N. Y.; 425; sec., Margaret A. Jackson.
- INFANTILE PARALYSIS, NATIONAL FOUNDATION FOR.** (1938) 120 Broadway, New York, N. Y.; exec. sec., Peter J. A. Cusack.
- IRON AND STEEL INSTITUTE, AMERICAN.** (1908) 350 Fifth Ave., New York 1, N. Y.; sec., George S. Rose.
- IZAAK WALTON LEAGUE OF AMERICA, INC.** (1922) Merchandise Mart, Chicago; pres., Tappan Gregory.
- JEWISH FEDERATION AND WELFARE FUNDS, COUNCIL OF.** (1932) 165 West 46th St., New York 19, N. Y.; 255 Federations, Welfare Funds and Community Councils; exec. dir., H. L. Lurie.
- JEWISH WAR VETERANS OF THE U. S.** (1896) 276 Fifth Ave., New York 1, N. Y.; 150,000; nat. sec., Beatrice Wigeton.
- JEWISH WELFARE BOARD, NATIONAL.** (1917) 145 East 32nd St., New York 16, N. Y.; sec., Joseph Rosenzweig; 390,000.
- JEWISH WOMEN, NATIONAL COUNCIL OF.** (1893) 65,000; 1819 Broadway, New York 23, N. Y.; exec. dir., Flora R. Ruthenberg.
- KINDERGARTEN ASSOCIATION, NATIONAL.** (1909) 8 W. 40th St., New York 18, N. Y.; exec. sec., Bessie Lock.
- KIWANIS INTERNATIONAL.** (1915) 154,000 business & prof. leaders; 2,340 clubs in U. S. & Canada; 530 North Michigan Ave., Chicago 11, Ill.; sec., O. E. Peterson.
- KNIGHTS OF COLUMBUS.** (1882) 45 Wall St., New Haven, Connecticut; 459,034; sup. sec., Joseph F. Lamb, P. O. Drawer 1670, New Haven 7, Conn.
- KNIGHTS OF PYTHIAS.** (1864) 1054 Midland Bank Bldg., Minneapolis 1, Minn.; 350,000; sup. keeper of records and seal, Carl B. Bach.
- KNIGHTS TEMPLAR, GRAND ENCAMPMENT.** (1814) 428 Chamber of Commerce, Indianapolis 4; gr. rec., Adrain Homersby.
- LEGAL AID SOCIETIES, NATIONAL ASS'N. OF.** (1911) pres., Louis Fabricant, 11 Park Place, New York 7, N. Y.
- LIBRARY ASSOCIATION, AMERICAN.** (1876) 520 N. Michigan Ave., Chicago 11, Ill.; 15,000; exec. sec., Carl H. Milam.
- LIONS CLUB, INTERNATIONAL ASS'N.** (1917) 332 S. Michigan Ave., Chicago, Ill.; 165,000; sec. gen., Melvin Jones.
- LUTHER LEAGUE OF AMERICA.** 1228 Spruce St., Philadelphia 7, Pa.; exec. sec. Rev. Joseph W. Frease.
- MANUFACTURERS, NATIONAL ASSOCIATION OF.** (1895) 14 West 49th St., New York 20, N. Y.; 12,000; sec., Noel Sargent.
- MASONS, F. & A., GRAND LODGE OF THE STATE OF N. Y.** (1781) Masonic Hall, 71 West 23rd St., New York 10, N. Y.; 242,720; gr. sec., Charles M. Johnson. There are 15,264 lodges with a membership of 2,565,391 in the 48 states, District of Columbia and Puerto Rico.
- MATHEMATICAL SOCIETY, AMERICAN.** (1868) 531 West 116th St., New York 27, N. Y.; 2,700; sec., Prof. J. R. Kline.
- MAYFLOWER DESCENDANTS, GENERAL SOCIETY OF.** (1897) Winslow House, Plymouth, Mass.; 6,602.
- MEDICAL ASSOCIATION, AMERICAN.** (1847) 535 N. Dearborn St., Chicago 10, Ill.; 124,755; sec. & gen. mgr., Dr. Olin West.
- MEDICAL WOMEN'S ASSOCIATION, AMERICAN.** (1915) 50 W. 50th St., New York 20, N. Y.; 2,000; sec., Dr. Carrol LeFleur Dirch, 1214 North Dearborn St., Chicago, Ill.
- MERCHANT MARINE INSTITUTE, AMERICAN.** (1938) 11 Broadway, New York, N. Y.; 60; sec., R. J. Baker.
- METEOROLOGICAL SOCIETY, AMERICAN.** (1919) Blue Hill Observatory, Milton 26, Mass.; 1,600; sec., Charles F. Brooks.
- METHODIST EPISCOPAL CHURCH, EPWORTH LEAGUE OF THE.** (1890) 740 Rush St., Chicago, Ill.
- MILITARY AND NAVAL OFFICERS WORLD WARS, NEW YORK SOCIETY OF.** (1920) 625 Madison Ave., New York, N. Y.; 800; sec., Lt. Col. H. W. Muller.
- MILITARY ORDER OF THE LOYAL LEGION OF THE U. S.** (1865) 1805 Pine St., Philadelphia 3, Pa.; 1,869; rec.-in-chief, Kane S. Green.
- MISSIONARY ASSOCIATION, AMERICAN.** (1846) 287 Fourth Ave., New York 10, N. Y.; gen. sec., Fred L. Brownlee.
- MOOSE, LOYAL ORDER OF.** (1888) Mooseheart, Illinois; 593,391; sup. sec., Malcolm R. Giles.
- MUSIC CLUBS, NATIONAL FEDERATION OF.** (1898) 4,700 clubs; 320 Wait Ave., Ithaca, New York; pres., Mrs. Vincent H. Ober; sec., Mrs. W. A. Goforth.
- NATIONAL ASSOCIATION FOR THE ADVANCEMENT OF COLORED PEOPLE.** (1909) 20 West 40th St., New York 18, N. Y.; exec. sec., Walter White.

- NATIONAL GRANGE, THE.** (1867) 744 Jackson Place, N. W., Washington, D. C.; 800,000; master, A. S. Goss.
- NATURALISTS, AMERICAN SOCIETY OF.** (1883) 55; pres., Prof. Fay-Cooper Cole, Dept. of Anthropology, Univ. of Chicago.
- NAVY LEAGUE OF THE U. S.** (1902) Mills Bldg., Washington 6, D. C.; 10,000; sec., Evelyn M. Collins.
- NEWSPAPER PUBLISHERS' ASSOCIATION, AMERICAN.** (1887) 370 Lexington Ave., New York 17, New York; 671 daily newspapers; gen. mgr., Cranston Williams.
- NEW YORK ACADEMY OF MEDICINE.** (1842) 2 East 103rd St., New York, N. Y.; dir., Herbert B. Wilcox.
- NURSES ASSOCIATION, AMERICAN.** (1896) 50 W. 50th St., New York, N. Y.; 178,550; exec. sec., Miss Alma H. Scott.
- ODD FELLOWS, INDEPENDENT ORDER OF.** (1819) 1,406,838; 16 W. Chase St., Baltimore, Md.; Grand Sire, D. D. Monroe.
- PORT.** (American Federation) (1921) 212 Fifth Ave., New York, N. Y.; pres., George Backer.
- OWLS, ORDER OF.** (1904) Owl Bldg., 311 Wethersfield Ave., Hartford, Conn.; 245,000; sup. sec., T. B. Kleiman.
- PAN AMERICAN UNION.** (1890) 17th St., and Constitution Ave., Washington 6, D. C.; 21 American Republics; dir. gen., L. S. Rowe.
- PARENTS AND TEACHERS, NATIONAL CONGRESS OF.** (1897) 600 S. Michigan Blvd., Chicago 5, Ill.; 3,054,950; sec., Mrs. H. S. Klein.
- PETROLEUM INSTITUTE, AMERICAN.** (1919) 50 West 40th St., New York 20, N. Y.; 4,000; sec., Lacy Walker.
- PHARMACEUTICAL ASSOCIATION, AMERICAN.** (1852) 2215 Constitution Ave., Washington, D. C.
- PHILATELIC SOCIETY, AMERICAN** (1886) P. O. Box 800, State College, Pa.; 7,000; exec. sec., H. Clay Musser.
- PHYSICAL SOCIETY, AMERICAN.** (1899) Columbia University, New York 27, N. Y.; 5,000; sec., Dr. Karl K. Darrow.
- PHYSICIANS, AMERICAN COLLEGE OF.** (1915) 4200 Pine St., Philadelphia 4, Pa.; 5,198; exec. sec., E. R. Loveland.
- PIGRIMS OF THE UNITED STATES.** (1904) 17 E. 42nd St., New York, N. Y.
- PLANNED PARENTHOOD FED. OF AMERICA.** (1921) sec., Mrs. Walter N. Rothschild; 10,000; 501 Madison Ave., New York, N. Y.
- POLITICAL AND SOCIAL SCIENCE, AMERICAN ACADEMY OF.** (1889) 3457 Walnut St., Philadelphia 4, Pa.; 9,500; sec., Dr. J. P. Lichtenberger.
- PREVENTION OF CRUELTY TO ANIMALS, AMERICAN SOCIETY FOR THE.** (1866) 50 Madison Ave., New York 10, N. Y.; 6,500; exec. vice pres., Sydney H. Coleman.
- PREVENTION OF WAR, NATIONAL COUNCIL FOR.** (1921) 1613 18th St., N. W., Washington 6, D. C.; exec. sec., Frederick J. Libby.
- PSYCHIATRIC ASSOCIATION, AMERICAN.** (1844) 9 Rockefeller Plaza, New York 20, N. Y.; 3,659; exec. ass't., Austin M. Davies.
- PUBLIC HEALTH ASSOCIATION, AMERICAN.** (1872) 1790 Broadway, New York 19, N. Y.; 9,800; exec. sec., Dr. Reginald M. Atwater.
- PUBLIC HEALTH NURSING, NATIONAL ORGANIZATION FOR.** (1912) 1790 Broadway, New York 19, N. Y.; gen. dir., Ruth Houlton.
- PUBLIC HOUSING CONFERENCE, NATIONAL.** (1931) 1,000; 122 E. 22nd St., N. Y. C.; exec. dir., Helen Alfred.
- RAILROADS, ASSOCIATION OF AMERICAN.** (1934) Transportation Bldg., Washington 6, D. C.; 137 railroad systems; sec., J. H. Forester.
- RED CROSS, AMERICAN NATIONAL.** (1881) 17th St., Washington 13, D. C.; 17,281,502 junior; 29,000,000 senior.
- RED MEN, IMPROVED ORDER OF.** (1834) 1521 W. Girard St., Philadelphia 30, Pa.; 149,459; Gr. Chief of Records, Herbert F. Stetser.
- REFORMED CHURCH OF THE U. S., BOARD OF FOREIGN MISSIONS OF THE.** (1838) 1505 Race St., Philadelphia 2, Pa.; sec., Rev. A. V. Casselman, D.D.
- ROOSEVELT MEMORIAL ASSOCIATION.** (1919) Theodore Roosevelt House, 28 E. 20th St., New York 3, N. Y.; sec. Hermann Hagedorn.
- ROSE SOCIETY, AMERICAN.** (1898) Box 687, Harrisburg, Pa.; 5,300; sec., R. C. Allen.
- ROTARY INTERNATIONAL.** (1905) 35 East Wacker Drive, Chicago 1, Ill.; 5,201 clubs; 225,750 members; sec., Philip Lovejoy.
- ROYAL ARCANUM, SUPREME COUNCIL OF THE.** (1877) 407 Shawmut Ave., Boston 18, Mass.; 55,000; sec., Herbert F. Hotchkiss, Station A, Boston 18, Mass.
- SAFETY COUNCIL, INC., NATIONAL.** (1913) 5216; 20 N. Wacker Drive, Chicago 6, Ill.; managing dir., W. H. Cameron.
- SALVATION ARMY.** (1865) 120 W. 14th St., New York City; nat'l. sec., Com. Edward J. Parker.
- SCHOOLS & COLLEGES ASSOCIATION, AMERICAN.** (1914) 30 Rockefeller Plaza, New York City; 500.
- SCIENCE, AMERICAN ASS'N. FOR THE ADVANCEMENT OF.** (1848) Smithsonian Institution Bldg., Washington 25, D. C.; 25,485; permanent sec., Dr. F. R. Moulton.
- SCIENCES, NATIONAL ACADEMY OF.** (1863) 2101 Constitution Ave., N. W., Washington 25, D. C.; 352 members, 41 foreign associates; home sec., Dr. Fred E. Wright.

- SEAMEN'S SERVICE, UNITED.** (1942) 39 Broadway, New York 6, N. Y.; exec. dir., Douglas P. Falconer.
- SEEING EYE, INC., THE.** (1929) 15,367; school at Morristown, N. J.; pres., Henry A. Colgate, treas., Herman J. Cook.
- SOCIAL HYGIENE ASSOCIATION, AMERICAN.** (1914) 1790 Broadway, New York 19, N. Y.; 18,000; sec., Dailey B. Durritt.
- SONS OF THE AMERICAN REVOLUTION, NATIONAL SOCIETY OF.** (1889) 1227 16th St., N. W., Washington 6, D. C.; 16,000; sec. gen., Frank D. Steele.
- SONS OF CONFEDERATE VETERANS.** (1896) Rm. 301-6 Law Bldg., Richmond, Va.; 15,000.
- SONS OF THE REVOLUTION, GENERAL SOCIETY.** (1876) In 30 states & Dist. of Col.; 10,000; gen. sec., Loyt Garrod Post, 4 Linwood Place, White Plains, N. Y.
- SPANISH WAR VETERANS, UNITED.** (1898) 40 G St., N. E., Washington 13, D. C.; 90,000; com. gen., P. J. Gallan.
- STANDARDS ASSOCIATION, AMERICAN.** (1918) 29 West 39th St., New York 18, N. Y.; sec., P. G. Agnew.
- STATISTICAL ASSOCIATION, AMERICAN.** (1839) 1603 K St., N. W., Washington 6, D. C.; 3,034; sec., Lester S. Kellogg.
- STEBEN SOCIETY OF AMERICA.** (1919) 369 Lexington Ave., New York City.
- STUDENT ASSEMBLY, UNITED STATES.** pres., Mary Lou Rogers, Swarthmore College, Swarthmore, Pa.
- STUDENT FEDERATION OF AMERICA, NATIONAL.** (1925) 1410 H St., N. W., Washington, D. C.; pres., John Darnell.
- SURGEONS, AMERICAN COLLEGE OF.** (1913) Sec., Warfield M. Firor, MD.; Johns Hopkins Hospital, Baltimore, Md.
- TRAVELERS AID SOCIETY.** (1907) 144 E. 44th St., New York 17, N. Y.; 4,528; gen. dir., Katherine E. Young.
- TUBERCULOSIS ASSOCIATION, NATIONAL.** (1904) 1790 Broadway, New York 19, N. Y.; mgr. dir., Dr. Kendall Emerson.
- UNITED NATIONS ASSOCIATION.** (Formerly League of Nations Ass'n., 1923); 7,300; 8 W. 40th St., New York 18, N. Y.; dir., Clark M. Eichelberger.
- UNITED SERVICE ORGANIZATIONS (USO).** 350 Fifth Ave., New York 1, N. Y.; sec., Randall J. LaBoeuf, Jr.
- UNIVERSITY PROFESSORS, AMERICAN ASS'N. OF.** (1915) 1155 16th St., N. W., Washington 6, D. C.; 15,872; gen. sec., Ralph E. Himstead.
- UNIVERSITY WOMEN, AMERICAN ASS'N. OF.** (1881) 1634 I St., N. W., Washington 6, D. C.; 70,943; gen. dir., Dr. Kathryn McHale.
- VETERANS ASSOCIATION, AMERICAN.** (1932) 271 Madison Ave., New York 16, N. Y.; 13,000; sec., John P. Dunlap, Jr.
- VETERANS OF FOREIGN WARS OF THE U. S.** (1899) Broadway & 34th St., Kansas City 2, Mo.; 250,000; adjt. gen., R. B. Handy, Jr.
- WAR OF 1812, GENERAL SOCIETY OF THE.** (1814) 441 Lexington Ave., New York, N. Y.; 600; pres. gen., J. Hall Long; sec. gen., John Harmon Noble.
- WOMAN'S CHRISTIAN TEMPERANCE UNION, NATIONAL.** (1874) 1730 Chicago Ave., Evanston, Ill.; 500,000; corr. sec., Miss Lilly Grace Matheson.
- WOMEN OF THE U. S., INC., NATIONAL COUNCIL FOR.** (1888) 17 affiliated organizations; 5,000,000 members; 501 Madison Ave., New York; exec. sec., Mrs. Charlotte Payne.
- WOMEN VOTERS, NATIONAL LEAGUE OF.** (1920) 726 Jackson Pl., N. W., Washington 6, D. C.; 60,000; sec., Mrs. Daniel Earley.
- WOMEN'S CLUBS, GENERAL FEDERATION OF.** (1890) 1734 N St., N. W., Washington 6, D. C.; 16,500 clubs; 2,500,000 women; exec. sec., Mrs. Thalia S. Woods; pres., Mrs. La Fell Dickinson.
- WOMEN'S CLUBS, NATIONAL FEDERATION OF BUSINESS & PROFESSIONAL.** (1919) 1819 Broadway, New York 23, N. Y.; 79,000; exec. sec., Louise Franklin Bache.
- WOMEN'S INTERNATIONAL LEAGUE FOR PEACE & FREEDOM.** (1915) 1734 F St., N. W., Washington 6, D. C.; 8,000; exec. sec., Dorothy Detyer.
- WOMEN'S VOLUNTARY SERVICES, AMERICAN.** (1940) 345 Madison Ave., New York City; 325,000; founder & pres., Mrs. Alice T. McLean.
- WOODMEN CIRCLE, SUPREME FOREST.** (1895) 3303 Farnam St., Omaha 2, Nebr.; 133,417; nat'l. sec., Clara B. Cassidy.
- WOODROW WILSON FOUNDATION.** (1922) 45 E. 65th St., New York 21, N. Y.; exec. dir., Mrs. Burnett Mahon.
- WORLD CALENDAR ASSOCIATION.** (1930) Int'l. Bldg., 630 Fifth Ave., New York 20, N. Y.; 12,800; sec., Miss Harriet A. Lillee.
- YOUNG MEN'S CHRISTIAN ASSOCIATION, NATIONAL COUNCIL OF.** 347 Madison Ave., New York 17, N. Y.; 1,466,824; gen. sec., Eugene E. Barnett.
- YOUNG MEN'S HEBREW ASSOCIATION.** (1874) 220 Fifth Ave., New York, N. Y.; 6,000; sec., Fabian M. Crystal.
- YOUNG WOMEN'S CHRISTIAN ASSOCIATIONS OF THE U. S. OF AMERICA, NAT'L ORGANIZATION OF.** (1906) 600 Lexington Ave., New York 22, New York; 622,000; sec. of nat'l. bd., Mrs. William Crawford White.
- YOUNG WOMEN'S HEBREW ASSOCIATION.** (1903) 220 Fifth Ave., New York, N. Y.; sec., Mrs. Benjamin Marshall.
- YOUTH CONGRESS, AMERICAN.** (1934) 4,500,000; 230 Fifth Ave., New York; exec. sec., Joseph Gooden.
- ZIONIST ORGANIZATION OF AMERICA.** (1897) 1720 16th St., N. W., Washington 9, D. C.; 150,000; Dr. Sidney Marks.
- ZOOLOGISTS, AMERICAN SOCIETY OF.** (1890) 1,059; sec., L. V. Domm, Univ. of Chicago, Chicago 37, Ill.

NOBEL PRIZES

The Nobel prizes are awarded under the will of Alfred Bernhard Nobel, Swedish chemist and engineer, who died in 1896. The interest of the fund is divided annually among the persons who have made the most outstanding contributions in the field of physics, chemistry, and physiology or medicine, who have produced the most distinguished literary work of an idealist tendency, and who have contributed most toward world peace.

The prizes for physics and chemistry are awarded by the Swedish Academy of Science in Stockholm, the one for physiology or medicine by the Caroline Medical Institute in Stockholm, that for literature by the academy in Stockholm, and that for peace by a committee of five elected by the Norwegian Storting.

The distribution of prizes was begun on December 10, 1901, the anniversary of Nobel's death. The amount of each prize varies with the income from the fund and since 1936 has stood at approximately £8,000.

Year	Literature	Peace
1901	René F. A. Sully Prudhomme (France)	Henri Dunant (Switzerland) and Frederick Passy (France)
1902	Theodor Mommsen (Germany)	Elie Ducommun and Albert Gobat (Switzerland)
1903	Björnsterne Björnson (Norway)	Sir William R. Cremer (England)
1904	Frédéric Mistral (France) and José Echegaray (Spain)	Institut de Droit International (Belgium)
1905	Henryk Sienkiewicz (Poland)	Bertha von Suttner (Austria)
1906	Giosuè Carducci (Italy)	Theodore Roosevelt (U. S.)
1907	Rudyard Kipling (England)	Ernesto T. Moneta (Italy) and Louis Renault (France)
1908	Rudolf Eucken (Germany)	Klas P. Arnoldson (Sweden) and Frederik Bajer (Denmark)
1909	Selma Lagerlöf (Sweden)	Auguste M. F. Beernaert (Belgium) and Baron Paul H. B. B. d'Estournelles de Constant de Rebecque (France)
1910	Paul von Heyse (Germany)	The Bureau International Permanent de la Paix (Switzerland)
1911	Maurice Maeterlinck (Belgium)	Tobias M. C. Asser (Holland) and Alfred H. Fried (Austria)
1912	Gerhart Hauptmann (Germany)	Elihu Root (U. S.)
1913	Rabindranath Tagore (India)	Henri La Fontaine (Belgium)
1914	No award	No award
1915	Romain Rolland (France)	No award
1916	Verner von Heidenstam (Sweden)	No award
1917	Karl Gjellerup (Denmark) and Henrik Pontoppidan (Denmark)	International Red Cross
1918	No award	No award
1919	Carl Spitteler (Switzerland)	Woodrow Wilson (U. S.)
1920	Knut Hamsun (Norway)	Léon Bourgeois (France)
1921	Anatole France (France)	Karl H. Branting (Sweden) and Christian L. Lange (Norway)
1922	Jacinto Benavente (Spain)	Fridtjof Nansen (Sweden)
1923	William B. Yeats (Ireland)	No award
1924	Wladyslaw Reymont (Poland)	No award
1925	George Bernard Shaw (England)	Sir Austen Chamberlain (England) and Charles G. Dawes (U. S.)
1926	Grazia Deledda (Italy)	Aristide Briand (France) and Gustav Stresemann (Germany)
1927	Henri Bergson (France)	Ferdinand Buisson (France) and Ludwig Quidde (Germany)
1928	Sigrid Undset (Sweden)	No award
1929	Thomas Mann (Germany)	Frank B. Kellogg (U. S.)
1930	Sinclair Lewis (U. S.)	Lars O. J. Söderblom (Sweden)
1931	Erik A. Karlfeldt (Sweden)	Jane Addams (U. S.) and Nicholas M. Butler (U. S.)
1932	John Galsworthy (England)	No award
1933	Ivan G. Bunin (Russia)	Sir Norman Angell (England)
1934	Luigi Pirandello (Italy)	Arthur Henderson (England)
1935	Eugene O'Neill (U. S.)	Carl von Ossietzky (Germany)
1936	Eugene O'Neill (U. S.)	Carlos de S. Lamas (Argentina)
1937	Roger Martin du Gard (France)	Lord Cecil of Chelwood (England)

Nobel Prizes—(cont.)

Year	Literature	Peace
1938	Pearl S. Buck (U. S.)	Office International Nansen pour les Réfugiés (Switzerland)
1939	Frans Emil Sillanpää (Finland)	No award
1940-1943	No awards	
1944	Johannes V. Jensen (Denmark)	International Red Cross
1945	Gabriela Mistral (Chile)	Cordell Hull (U. S.)
1946	Hermann Hesse (Switzerland)	Emily Greene Balch (U. S.) and John R. Mott (U. S.)

Year	Physics	Chemistry	Medicine
1901	Wilhelm C. Roentgen, for discovery of Roentgen rays.	Jacobus H. van 't Hoff, for discovery of laws of chemical dynamics and osmotic pressure in solutions.	Emil A. von Behring, for work on serum therapy against diphtheria.
1902	Hendrik A. Lorentz and Pieter Zeeman, for work on influence of magnetism upon radiation.	Emil Fischer, for experiments in sugar and purin groups of substances.	Sir Ronald Ross, for work on malaria.
1903	Henri A. Becquerel, for work on discovery of spontaneous radioactivity. Pierre and Marie Curie, for investigation of phenomena of radiation discovered by H. Becquerel.	Svante A. Arrhenius, for his electrolytic theory of dissociation.	Niels R. Finsen, for his treatment of lupus vulgaris, with concentrated light rays.
1904	John Strutt, Lord Rayleigh, for discovery of argon in investigating gas density.	Sir William Ramsay, for discovery and determination of the place of inert gaseous elements in the air.	Ivan P. Pavlov, for work on the physiology of digestion.
1905	Philipp Lenard, for work with cathode rays.	Adolph von Baeyer, for work on organic dyes and hydroaromatic combinations.	Robert Koch, for work on tuberculosis.
1906	Joseph J. Thomson, for investigations on passage of electricity through gases.	Henri Moissan, for isolation of fluorine, and introduction of electric furnace named after him.	Camillo Golgi and Santiago Ramon y Cajal, for work on the structure of the nervous system.
1907	Albert A. Michelson, for spectroscopic and metrologic investigations carried out with his precision optical instruments.	Eduard Buchner, for discovery of cell-less fermentation and investigations in biological chemistry.	Charles L. A. Laveran, for work with protozoa in the generation of disease.
1908	Gabriel Lippmann, for method of reproducing colors by photography.	Ernest Rutherford, for investigations into disintegration of elements and chemistry of radioactive substances.	Paul Ehrlich and Elie Metchnikoff, for work on immunity.
1909	Guglielmo Marconi and Ferdinand Braun, for development of wireless.	Wilhelm Ostwald, for work on catalysis and investigations into principles governing chemical equilibrium and reaction rates.	Theodor Kocher, for work on the thyroid gland.
1910	Johannes D. van der Waals, for work with the equation of state for gases and liquids.	Otto Wallach, for work in the field of alicyclic compounds.	Albrecht Kossel, for achievements in the chemistry of the cell.

Year	Physics	Chemistry	Medicine
1911	Wilhelm Wien, for his laws governing the radiation of heat.	Marie S. Curie, for discovery of elements radium and polonium.	Allvar Gullstrand, for work on the dioptrics of the eye.
1912	Gustaf Dalén, for discovery of automatic regulators used in lighting lighthouses and light buoys.	Victor Grignard, for reagent discovered by and named after him; and Paul Sabatier, for the methods of hydrogenating organic compounds.	Alexis Carrel, for work on vascular ligature and grafting of blood vessels and organs.
1913	Onnes H. Kamerlingh, for work leading to production of liquid helium.	Alfred Werner, for linking up atoms within the molecule.	Charles Richet, for work on anaphylaxy.
1914	Max von Laue, for discovery of defraction of Roentgen rays passing through crystals.	Theodore W. Richards, for determining atomic weight of many chemical elements.	Robert Bárány, for work on physiology and pathology of the vestibular system.
1915	W. H. Bragg and W. L. Bragg, for analysis of crystal structure by means of X rays.	Richard Willstätter, for research into coloring matter of plants, especially chlorophyll.	No award.
1916	No award.	No award.	No award.
1917	Charles G. Barkla, discovery of Roentgen radiation of the elements.	No award.	No award.
1918	Max Planck, for discoveries in connection with quantum theory.	Fritz Haber, for synthetic production of ammonia.	No award.
1919	Johannes Stark, discovery of Doppler effect in Canal rays and decomposition of spectrum lines by electric fields.	No award.	Jules Bordet, for discoveries in connection with immunity.
1920	Charles E. Guillaume, for discoveries of anomalies in nickel steel alloys.	Walther Nernst, for work in thermochemistry.	August Krogh, discovery of regulation of motor mechanism of capillaries.
1921	Albert Einstein, for discovery of the law of the photoelectric effect.	Frederick Soddy, for investigations into origin and nature of isotopes.	No award.
1922	Niels Bohr, for investigations of structure of atoms and radiations emanating from them.	Francis W. Aston, for discovery of isotopes in nonradioactive elements and for discovery of the whole number rule.	In 1923 the prize for 1922 was divided between Archibald V. Hill for discovery relating to heat-production in muscles and Otto Meyerhof, for correlation between consumption of oxygen and production of lactic acid in the muscles.
1923	Robert A. Millikan, for works on elementary charge of electricity and photoelectric phenomena.	Fritz Pregl, for method of microanalysis of organic substances discovered by him.	Frederick G. Banting and John J. R. MacLeod, for discovery of insulin.
1924	Karl M. G. Siegbahn, for investigations in X-ray spectroscopy.	No award.	Willem Einthoven, for discovering the mechanism of the electrocardiogram.
1925	James Franck and Gustav Hertz, for discovery of laws governing impact of electrons upon atoms.	In 1926 the 1925 prize was awarded to Richard Zsigmondy, for exposition of the heterogeneous nature of colloid solutions.	No award.

Nobel Prizes—(cont.)

Year	Physics	Chemistry	Medicine
1926	Jean Perrin, for works on discontinuous structure of matter and discovery of the equilibrium of sedimentation.	The Svedberg, for work on disperse systems.	Johannes Fibiger, for discovery of the Spiroptera carcinoma.
1927	Arthur H. Compton, for discovery of Compton phenomenon; and Charles T. R. Wilson, for the method of perceiving the paths taken by electrically charged particles.	In 1928 the 1927 prize was awarded to Heinrich Wieland, for investigations of bile acids and kindred substances.	Julius Wagner-Jauregg, for use of malaria inoculation in treatment of dementia paralytica.
1928	In 1929 the 1928 prize was awarded to Owen W. Richardson, for work on the phenomenon of thermionics and discovery of the Richardson Law.	Adolf Windaus, for investigations on constitution of the sterols and their connection with vitamins.	Charles Nicolle, for work on typhus exanthematicus.
1929	Prince Louis Victor de Broglie, for discovery of the wave character of electrons.	Arthur Harden and Hans K. A. S. von Euler-Chelpin, for research of fermentation of sugars.	Christiaan Eijkman, for discovery of the anti-neuritic vitamins; and Sir Frederick G. Hopkins, for discovery of growth-promoting vitamins.
1930	Sir Chandrasekhara V. Raman, for work on diffusion of light and discovery of the Raman effect.	Hans Fischer, for work on coloring matter of blood and leaves and for his synthesis of hemin.	Karl Landsteiner, for discovery of human blood groups.
1931	No award.	Carl Bosch and Friedrich Bergius, for invention and development of chemical high-pressure methods.	Otto H. Warburg, for discovery of the character and mode of action of the respiratory ferment.
1932	In 1933 the prize for 1932 was awarded to Werner Heisenberg, for creation of the quantum mechanics.	Irving Langmuir, for work in realm of surface chemistry.	Sir Charles S. Sherrington and Edgar D. Adrian, for discoveries of the function of the neuron.
1933	Erwin Schroedinger and P. A. M. Dirac, for discovery of new fertile forms of the atomic theory.	No award.	Thomas H. Morgan, for discoveries on hereditary function of the chromosomes.
1934	No award.	Harold C. Urey, for discovery of heavy hydrogen.	George H. Whipple, George R. Minot, and William P. Murphy, for discovery of liver therapy against anaemias.
1935	James Chadwick, for discovery of the neutron.	Frédéric and Irène Curie Joliot, for synthesis of new radioactive elements.	Hans Spemann, for discovery of the organizer-effect in embryonic development.
1936	Victor F. Hess, for discovery of cosmic radiation; and Carl D. Anderson, for discovery of the positron.	Peter J. W. Debye, for investigations on dipole moments and diffraction of X rays and electrons in gases.	Sir Henry H. Dale and Otto Loewi, for discoveries on chemical transmission of nerve impulses.
1937	Clinton J. Davisson and George P. Thomson, for discovery of diffraction of electrons by crystals.	Walter N. Haworth, for research on carbohydrates and Vitamin C.	Albert Szent-Györgyi von Nagyrápolt, for discoveries on biological combustion.

Year	Physics	Chemistry	Medicine
1938	Enrico Fermi, for identification of new radioactivity elements and discovery of nuclear reactions effected by slow neutrons.	Richard Kuhn, for carotinoid study and vitamin research.	Corneill Heymans, for importance of sinus and aorta mechanisms in the regulation of respiration.
1939	Ernest Orlando Lawrence, for the development of the cyclotron.	Adolf Friedrich Johann Butenandt, for work on sexual hormones (declined the prize) and Leopold Ruzicka, work with polymetylenes.	Gerhard Domagk, antibacterial effect of pron-tocilate.
1940-42	No awards.		
1943	Otto Stern, for detection of magnetic momentum of protons.	George Hevesy De Heves, for work on use of isotopes as chemical indicators.	Henrik Dam, Edward A. Doisy for the discovery of the chemical nature of Vitamin K.
1944	Isidor Isaac Rabi, for work on magnetic movements of atomic particles.	Otto Hahn, for work on atomic fission.	Joseph Erlanger and Herbert Spencer Gasser, for work on functions of the nerve threads.
1945	Wolfgang Pauli, for work on atomic fissions.	Artturi Ilmari Virtanen, for research in the field of conservation of fodder.	Sir Alexander Fleming, Ernst Boris Chain, and Sir Howard Florey, for discovery of penicillin.
1946	Percy Williams Bridgman, studies and inventions in high-pressure physics.	James B. Sumner, crystallizing of enzymes. John H. Northrop and Wendell M. Stanley, preparing enzymes and virus proteins in pure form.	Hermann J. Muller, hereditary effects of X-ray on genes.

The Hall of Fame

The Hall of Fame for Great Americans, an open air colonnade 630 feet long, situated on the campus of New York University, contains busts of 75 of the 77 persons honored for national achievements. The names are chosen every five years by a committee of 100 men and women selected from all states. The last election was in 1945.

Name	Elected	Name	Elected
John Adams	1900	Ulysses Simpson Grant	1900
John Quincy Adams	1905	Asa Gray	1900
Louis Agassiz	1915	Alexander Hamilton	1915
John James Audubon	1900	Nathaniel Hawthorne	1900
George Bancroft	1910	Joseph Henry	1915
Henry Ward Beecher	1900	Patrick Henry	1920
Daniel Boone	1915	Oliver Wendell Holmes	1910
Edwin Booth	1925	Mark Hopkins	1915
Phillips Brooks	1910	Elias Howe	1915
William Cullen Bryant	1910	Washington Irving	1900
William Ellery Channing	1900	Andrew Jackson	1910
Rufus Choate	1915	Thomas Jefferson	1900
Henry Clay	1900	John Paul Jones	1925
Samuel Langhorne Clemens (Mark Twain)	1920	James Kent	1900
Grover Cleveland	1935 ✓	Sidney Lanier	1945 ✓
Peter Cooper	1900	Robert Edward Lee	1900
James Fenimore Cooper	1910	Abraham Lincoln	1900
Charlotte Saunders Cushman	1915	Henry Wadsworth Longfellow	1900
James Buchanan Eads	1920	James Russell Lowell	1905
Jonathan Edwards	1900	Mary Lyon	1905
Ralph Waldo Emerson	1900	James Madison	1905
David Glasgow Farragut	1900	Horace Mann	1900
Stephen Collins Foster	1940 ✓	John Marshall	1900
Benjamin Franklin	1900	Matthew Fontaine Maury	1930
Robert Fulton	1900	Maria Mitchell	1905
		James Monroe	1930

The Hall of Fame—(cont.)

Name	Elected	Name	Elected
Samuel Finley Breese Morse	1900	Joseph Story	1900
William Thomas Green Morton	1920	Harriet Beecher Stowe	1910
John Lothrop Motley	1910	Gilbert Charles Stuart	1900
Simon Newcomb	1935 ✓	Booker T. Washington	✓1945
Thomas Paine (no bust)	1945 ✓	George Washington	1900
Alice Freeman Palmer	1920	Daniel Webster	1900
Francis Parkman	1915	Emma Willard	1900
George Peabody	1900	Frances Elizabeth Willard	1910
William Penn	1935 ✓	Roger Williams	1920
Edgar Allan Poe	1910	James Abbott McNeill Whistler	1930
Walter Reed (no bust)	1945 ✓	Walt Whitman	1930
Augustus Saint-Gaudens	1920	Eli Whitney	1900
William Tecumseh Sherman	1905	John Greenleaf Whittier	1905

Pulitzer Prize Awards, 1917 to 1946

Source: Columbia University, New York.

Pulitzer Prizes in Journalism

Meritorious Public Service

- 1917 No award
 1918 *The New York Times*
 1919 *Milwaukee (Wis.) Journal*
 1920 No award
 1921 *Boston Post*
 1922 *The World* (New York, N. Y.)
 1923 *Memphis (Tenn.) Commercial Appeal*
 1924 *The World* (New York, N. Y.)
 1925 No award
 1926 *The Enquirer Sun* (Columbus, Ga.)
 1927 *Canton (O.) Daily News*
 1928 *Indianapolis (Ind.) Times*
 1929 *The Evening World* (New York, N. Y.)
 1930 No award
 1931 *Atlanta (Ga.) Constitution*
 1932 *Indianapolis (Ind.) News*
 1933 *New York World-Telegram*
 1934 *Medford (Ore.) Mail Tribune*
 1935 *The Sacramento (Calif.) Bee*
 1936 *The Cedar Rapids (Iowa) Gazette*
 1937 *St. Louis (Mo.) Post-Dispatch*
 1938 *The Bismarck (N. D.) Tribune*
 Special Bronze Plaque to:
Edmonton (Alberta) Journal
 1939 *The Miami (Fla.) Daily News*
 1940 *Waterbury (Conn.) Republican and American*
 1941 *St. Louis (Mo.) Post-Dispatch*
 1942 *Los Angeles (Calif.) Times*
 1943 *The World-Herald* (Omaha, Neb.)
 1944 *The New York Times*
 1945 *The Detroit (Mich.) Free Press*
 1946 *The Scranton (Pa.) Times*

Editorial

- 1917 *New York Tribune*
 1918 *The Courier-Journal* (Louisville, Ky.)
 1919 No award
 1920 *Evening World-Herald* (Omaha, Neb.)
 1921 No award
 1922 *The New York Herald*
 1923 *The Emporia (Kans.) Gazette*
 1924 *The Boston Herald*
 1925 *Charleston (S. C.) News and Courier*
 1926 *The New York Times*
 1927 *The Boston Herald*

- 1928 *Montgomery (Ala.) Advertiser*
 1929 *Norfolk (Va.) Virginian-Pilot*
 1930 No award
 1931 *Fremont (Neb.) Tribune*
 1932 No award
 1933 *The Kansas City (Mo.) Star*
 1934 *Atlantic (Ia.) News Telegraph*
 1935 No award
 1936 *The Washington Post*
 (FELIX MORLEY)
 Scripps-Howard newspapers
 (GEORGE B. PARKER)
 1937 *The Sun* (Baltimore, Md.)
 (JOHN W. OWENS)
 1938 *The Register and Tribune*
 (Des Moines, Ia.)
 (W. W. WAYMACK)
 1939 *The Oregonian* (Portland, Ore.)
 (RONALD G. CALLVERT)
 1940 *St. Louis (Mo.) Post-Dispatch*
 (BART HOWARD)
 1941 *Daily News* (New York, N. Y.)
 (REUBEN MAURY)
 1942 *New York Herald Tribune*
 (GEOFFREY PARSONS)
 1943 *The Register and Tribune*
 (Des Moines, Iowa)
 (FORREST W. SEYMOUR)
 1944 *The Kansas City (Mo.) Star*
 1945 *The Providence (R. I.) Journal-Bulletin*
 (GEORGE W. POTTER)
 1946 *The Delta Democrat-Times* (Greenville, Miss.)
 (HODDING CARTER)

Correspondence

- 1929 PAUL SCOTT MOWRER
 1930 LELAND STOWE
 1931 H. R. KNICKERBOCKER
 1932 WALTER DURANTY
 CHARLES G. ROSS
 1933 EDGAR ANSEL MOWRER
 1934 FREDERICK T. BIRCHALL
 1935 ARTHUR KROCK
 1936 WILFRED C. BARBER
 1937 ANNE O'HARE MCCORMICK

- 38 ARTHUR KROCK
- 39 LOUIS P. LOCHNER
- 40 OTTO D. TOLISCHUS
- 41 Group award*
- 42 CARLOS P. ROMULO
- 43 HANSON W. BALDWIN
- 44 ERNEST TAYLOR PYLE
- 45 HAROLD V. (HAL) BOYLE
- 46 ARNALDO CORTESI

*In place of an individual Pulitzer Prize for foreign correspondence, the Trustees approved the commendation of the Advisory Board that a bronze plaque or scroll be designed and executed to recognize and symbolize the public services and the individual achievements of American news reporters in the war zones of Europe, Asia, and Africa from the beginning of the present war.

Cartoon

- 22 ROLLIN KIRBY
- 23 No award
- 24 JAY NORWOOD DARLING
- 25 ROLLIN KIRBY
- 26 D. R. FITZPATRICK
- 27 NELSON HARDING
- 28 NELSON HARDING
- 29 ROLLIN KIRBY
- 30 CHARLES R. MACAULEY
- 31 EDMUND DUFFY
- 32 JOHN T. MCCUTCHEON
- 33 HAROLD MORTON TALBURT
- 34 EDMUND DUFFY
- 35 ROSS A. LEWIS
- 36 No award
- 37 CLARENCE DANIEL BATCHELOR
- 38 VAUGHN SHOEMAKER
- 39 CHARLES G. WERNER
- 40 EDMUND DUFFY
- 41 JACOB BURCK
- 42 HERBERT LAWRENCE BLOCK
- 43 JAY NORWOOD DARLING
- 44 CLIFFORD K. BERRYMAN
- 45 BILL MAULDIN
- 46 BRUCE RUSSELL

News Photography

- 42 MILTON BROOKS
- 43 FRANK NOEL
- 44 FRANK FILAN
- EARLE L. BUNKER
- 45 JOE ROSENTHAL
- 46 No award

Telegraphic Reporting (National)

- 42 LOUIS STARK
- 43 No award
- 44 DEWEY L. FLEMING
- 45 JAMES B. RESTON
- 46 EDWARD A. HARRIS

Telegraphic Reporting (International)

- 42 LAURENCE EDMUND ALLEN
- 43 IRA WOLFERT
- 44 DANIEL DE LUCE

Novel*

- 18 *His Family*. By ERNEST POOLE
- 19 *The Magnificent Ambersons*. By BOOTH TARKINGTON

- 1945 MARK S. WATSON
- 1946 HOMER BIGART

Reporting

- 1917 HERBERT BAYARD SWOPE
- 1918 HAROLD A. LITLEDALE
- 1920 JOHN J. LEARY, JR.
- 1921 LOUIS SEIBOLD
- 1922 KIRKE L. SIMPSON
- 1923 ALVA JOHNSTON
- 1924 MAGNER WHITE
- 1925 JAMES W. MULROY
- ALVIN H. GOLDSTEIN
- 1926 WILLIAM BURKE MILLER
- 1927 JOHN T. ROGERS
- 1928 No award
- 1929 PAUL Y. ANDERSON
- 1930 RUSSELL OWEN
- Special award: W. O. DAPPING
- 1931 A. B. MACDONALD
- 1932 W. C. RICHARDS
- D. D. MARTIN
- J. S. POOLER
- F. D. WEBB
- J. N. W. SLOAN
- 1933 FRANCIS A. JAMIESON
- 1934 ROYCE BRIER
- 1935 WILLIAM H. TAYLOR
- 1936 LAUREN D. LYMAN
- 1937 JOHN J. O'NEILL
- WILLIAM L. LAURENCE
- HOWARD W. BLAKESLEE
- GOBIND BEHARI LAL
- DAVID DIETZ
- 1938 RAYMOND SPRIGLE
- 1939 THOMAS LUNSFORD STOKES
- 1940 S. BURTON HEATH
- 1941 WESTBROOK PEGLER
- 1942 STANTON DELAPLANE
- 1943 GEORGE WELLER
- 1944 PAUL SCHOENSTEIN and associates
- 1945 JACK S. McDOWELL
- 1946 WILLIAM L. LAURENCE

Special Citation

- 1941 *The New York Times* for the public educational value of its foreign news report, exemplified by its scope, by excellence of writing and presentation, and supplementary background information, illustration, and interpretation.
- 1944 BYRON PRICE, Director of the Office of Censorship, for the creation and administration of the newspaper and radio codes.
- 1945 The cartographers of the American press whose maps of the war fronts have helped notably to clarify and increase public information on the progress of the Armies and Navies.

Pulitzer Prizes in Letters

- 1921 *The Age of Innocence*. By EDITH WHARTON
- 1922 *Alice Adams*. By BOOTH TARKINGTON
- 1923 *One of Ours*. By WILLA CATHER

Pulitzer Prizes in Letters—(cont.)

- 1924 *The Able McLaughlins*. By MARGARET WILSON
- 1925 *So Big*. By EDNA FERBER
- 1926 *Arrowsmith*. By SINCLAIR LEWIS
- 1927 *Early Autumn*. By LOUIS BROMFIELD
- 1928 *The Bridge of San Luis Rey*. By THORNTON WILDER
- 1929 *Scarlet Sister Mary*. By JULIA PETERKIN
- 1930 *Laughing Boy*. By OLIVER LA FARGE
- 1931 *Years of Grace*. By MARGARET AYER BARNES
- 1932 *The Good Earth*. By PEARL S. BUCK
- 1933 *The Store*. By T. S. STRIBLING
- 1934 *Lamb in His Bosom*. By CAROLINE MILLER
- 1935 *Now in November*. By JOSEPHINE WINSLOW JOHNSON
- 1936 *Honey in the Horn*. By HAROLD L. DAVIS
- 1937 *Gone With the Wind*. By MARGARET MITCHELL
- 1938 *The Late George Apley*. By JOHN PHILLIPS MARQUAND
- 1939 *The Yearling*. By MARJORIE KINNAN RAWLINGS
- 1940 *The Grapes of Wrath*. By JOHN STEINBECK
- 1942 *In This Our Life*. By ELLEN GLASGOW
- 1943 *Dragon's Teeth*. By UPTON SINCLAIR
- 1944 *Journey in the Dark*. By MARTIN FLAVIN
- 1945 *A Bell for Adano*. By JOHN HERSEY
- 1939 *Abe Lincoln in Illinois*. By ROBERT SHERWOOD
- 1940 *The Time of Your Life*. By WILLIAM SAROYAN
- 1941 *There Shall Be No Night*. By ROBERT SHERWOOD
- 1943 *The Skin of Our Teeth*. By THORNTON WILDER
- 1945 *Harvey*. By MARY CHASE
- 1946 *State of the Union*. By RUSSEL CROUSE and HOWARD LINDSAY

*No awards in 1917, 1919, 1942, 1944.

History

Drama*

- 1918 *Why Marry?* By JESSE LYNCH WILLIAMS
- 1920 *Beyond the Horizon*. By EUGENE O'NEILL
- 1921 *Miss Lulu Bett*. By ZONA GALE
- 1922 *Anna Christie*. By EUGENE O'NEILL
- 1923 *Icebound*. By OWEN DAVIS
- 1924 *Hell-Bent Fer Heaven*. By HATCHER HUGHES
- 1925 *They Knew What They Wanted*. By SIDNEY HOWARD
- 1926 *Craig's Wife*. By GEORGE KELLY
- 1927 *In Abraham's Bosom*. By PAUL GREEN
- 1928 *Strange Interlude*. By EUGENE O'NEILL
- 1929 *Street Scene*. By ELMER L. RICE
- 1930 *The Green Pastures*. By MARC CONNELLY
- 1931 *Alison's House*. By SUSAN GLASPELL
- 1932 *Of Thee I Sing*. By GEORGE S. KAUFMAN, MORRIE RYSKIND & IRA GERSHWIN
- 1933 *Both Your Houses*. By MAXWELL ANDERSON
- 1934 *Men in White*. By SIDNEY KINGSLEY
- 1935 *The Old Maid*. By ZOE AKINS
- 1936 *Idiot's Delight*. By ROBERT E. SHERWOOD
- 1937 *You Can't Take It With You*. By MOSS HART and GEORGE S. KAUFMAN
- 1938 *Our Town*. By THORNTON WILDER
- 1917 *With Americans of Past and Present Days*. By His Excellency J. J. JUSSELAND, Ambassador of France to the United States
- 1918 *A History of the Civil War, 1861-1865*. By JAMES FORD RHODES
- 1919 No award
- 1920 *The War with Mexico*. By JUSTIN H. SMITH
- 1921 *The Victory at Sea*. By WILLIAM SOWDEN SIMS in collaboration with BURTON J. HENDRICK
- 1922 *The Founding of New England*. By JAMES TRUSLOW ADAMS
- 1923 *The Supreme Court in United States History*. By CHARLES WARREN
- 1924 *The American Revolution—A Constitutional Interpretation*. By CHARLES HOWARD MCILWAIN
- 1925 *A History of the American Frontier*. By FREDERIC L. PAXSON
- 1926 *The History of the United States*. By EDWARD CHANNING
- 1927 *Pinckney's Treaty*. By SAMUEL FLAGG BEMIS
- 1928 *Main Currents in American Thought*, 2 vols. By VERNON LOUIS PARRINGTON
- 1929 *The Organization and Administration of the Union Army, 1861-1865*. By FRED ALBERT SHANNON
- 1930 *The War of Independence*. By CLAUDE H. VAN TYNE
- 1931 *The Coming of the War: 1919*. By BERNADOTTE E. SCHMITT
- 1932 *My Experiences in the World War*. By JOHN J. PERSHING
- 1933 *The Significance of Sections in American History*. By FREDERICK J. TURNER
- 1934 *The People's Choice*. By HERBERT AGAR
- 1935 *The Colonial Period of American History*. By CHARLES MCLEAN ANDREWS
- 1936 *The Constitutional History of the United States*. By ANDREW C. MC LAUGHLIN
- 1937 *The Flowering of New England*. By VAN WYCK BROOKS
- 1938 *The Road to Reunion, 1865-1900*. By PAUL HERMAN BUCK
- 1939 *A History of American Magazines*. By FRANK LUTHER MOTT
- 1940 *Abraham Lincoln: The War Years*. By CARL SANDBURG

- 1941 *The Atlantic Migration, 1607-1860.* By MARCUS LEE HANSEN
 1942 *Reveille in Washington.* By MARGARET LEECH
 1943 *Paul Revere and the World He Lived In.* By ESTHER FORBES
 1944 *The Growth of American Thought.* By MERLE CURTI
 1945 *Unfinished Business.* By STEPHEN BONSAI
 1946 *The Age of Jackson.* ARTHUR M. SCHLESINGER, JR.

Biography

- 1917 *Julia Ward Howe.* By LAURA E. RICHARDS and MAUDE HOWE ELLIOTT assisted by FLORENCE HOWE HALL
 1918 *Benjamin Franklin, Self-Revealed.* By WILLIAM CABELL BRUCE
 1919 *The Education of Henry Adams.* By HENRY ADAMS
 1920 *The Life of John Marshall.* By ALBERT J. BEVERIDGE
 1921 *The Americanization of Edward Bok.* By EDWARD BOK
 1922 *A Daughter of the Middle Border.* By HAMLIN GARLAND
 1923 *The Life and Letters of Walter H. Page.* By BURTON J. HENDRICK
 1924 *From Immigrant to Inventor.* By MICHAEL IDVORSKY PUPIN
 1925 *Barrett Wendell and His Letters.* By M. A. DEWOLFE HOWE
 1926 *The Life of Sir William Osler.* By HARVEY CUSHING
 1927 *Whitman.* By EMORY HOLLOWAY
 1928 *The American Orchestra and Theodore Thomas.* By CHARLES EDWARD RUSSELL
 1929 *The Training of an American. The Earlier Life and Letters of Walter H. Page.* By BURTON J. HENDRICK
 1930 *The Raven.* By MARQUIS JAMES
 1931 *Charles W. Eliot.* By HENRY JAMES
 1932 *Theodore Roosevelt.* By HENRY F. PRINGLE
 1933 *Grover Cleveland.* By ALLAN NEVINS
 1934 *John Hay.* By TYLER DENNETT
 1935 *R. E. Lee.* By DOUGLAS S. FREEMAN
 1936 *The Thought and Character of William James.* By RALPH BARTON PERRY
 1937 *Hamilton Fish.* By ALLAN NEVINS
 1938 *Pedlar's Progress.* By ODELL SHEPARD
 1939 *Andrew Jackson (2 vols).* By MARQUIS JAMES
 1939 *Benjamin Franklin.* By CARL VAN DOREN
 1940 *Woodrow Wilson. Life and Letters, Vol. VII and VIII.* By RAY STANNARD BAKER
 1941 *Jonathan Edwards.* By OLA ELIZABETH WINSLOW
 1942 *Crusader in Crinoline.* By FORREST WILSON
 1943 *Admiral of the Ocean Sea.* By SAMUEL ELIOT MORISON
 1944 *The American Leonardo: The Life of Samuel F. B. Morse.* By CARLETON MABEE

- 1945 *George Bancroft: Brahmin Rebel.* By RUSSEL BLAINE NYE
 1946 *Son of the Wilderness.* By LINNIE MARSH WOLFE

Poetry*

- *Previous to the establishment of this prize in 1922, the 1918 and 1919 awards had been made from gifts provided by the Poetry Society.
- 1918 *Love Songs.* By SARA TEASDALE
 1919 *Old Road to Paradise.* By MARGARET WIDDEMER
 1922 *Corn Huskers.* By CARL SANDBURG
 1922 *Collected Poems.* By EDWIN ARLINGTON ROBINSON
 1923 *The Ballad of the Harp-Weaver; A Few Figs from Thistles; Eight Sonnets in American Poetry, 1922, A Miscellany.* By EDNA ST. VINCENT MILLAY
 1924 *New Hampshire: A Poem with Notes and Grace Notes.* By ROBERT FROST
 1925 *The Man Who Died Twice.* By EDWIN ARLINGTON ROBINSON
 1926 *What's O'Clock.* By AMY LOWELL
 1927 *Fiddler's Farewell.* By LEONORA SPEYER
 1928 *Tristram.* By EDWIN ARLINGTON ROBINSON
 1929 *John Brown's Body.* By STEPHEN VINCENT BENET
 1930 *Selected Poems.* By CONRAD AIKEN
 1931 *Collected Poems.* By ROBERT FROST
 1932 *The Flowering Stone.* By GEORGE DILLON
 1933 *Conquistador.* By ARCHIBALD MACLEISH
 1934 *Collected Verse.* By ROBERT HILLYER
 1935 *Bright Ambush.* By AUDREY WURDEMANN
 1936 *Strange Holiness.* By ROBERT P. TRISTRAM COFFIN
 1937 *A Further Range.* By ROBERT FROST
 1938 *Cold Morning Sky.* By MARYA ZATURENSKA
 1939 *Selected Poems.* By JOHN GOULD FLETCHER
 1940 *Collected Poems.* By MARK VAN DOREN
 1941 *Sunderland Capture.* By LEONARD BACON
 1942 *The Dust Which Is God.* By WILLIAM ROSE BENET
 1943 *A Witness Tree.* By ROBERT FROST
 1944 *Western Star.* By STEPHEN VINCENT BENET
 1945 *V-Letter and Other Poems.* By KARL SHAPIRO
 1946 No award

Music

- 1943 WILLIAM SCHUMAN
 1944 HOWARD HANSON
 1945 AARON COPLAND
 1946 LEO SOWERBY

Special Award

- 1944 *Oklahoma!* By RICHARD RODGERS and OSCAR HAMMERSTEIN, 2ND

List of Academy Awards for Production, Acting, and Direction

Year	Production		Direction
1928	<i>Wings</i> , Paramount	Frank Borzage	<i>Seventh Heaven</i> } joint
1929	<i>Broadway Melody</i> , M-G-M	Lewis Milestone	<i>Two Arabian Nights</i> } awards
1930	<i>All Quiet on the Western Front</i> , Universal	Frank Lloyd	<i>The Divine Lady</i>
1931	<i>Cimarron</i> , RKO	Lewis Milestone	<i>All Quiet on the Western Front</i>
1932	<i>Grand Hotel</i> , M-G-M	Norman Taurog	<i>Skippy</i>
1933	<i>Cavalcade</i> , Fox	Frank Borzage	<i>Bad Girl</i>
1934	<i>It Happened One Night</i> , Columbia	Frank Lloyd	<i>Cavalcade</i>
1935	<i>Mutiny on the Bounty</i> , M-G-M	Frank Capra	<i>It Happened One Night</i>
1936	<i>The Great Ziegfeld</i> , M-G-M	John Ford	<i>The Informer</i>
1937	<i>The Life of Emile Zola</i> , Warner	Frank Capra	<i>Mr. Deeds Goes to Town</i>
1938	<i>You Can't Take It With You</i> , Columbia	Leo McCarey	<i>The Awful Truth</i>
1939	<i>Gone With the Wind</i> , Selznick	Frank Capra	<i>You Can't Take It With You</i>
1940	<i>Rebecca</i> , Selznick	Victor Fleming	<i>Gone With the Wind</i>
1941	<i>How Green Was My Valley</i> , 20th Century-Fox	John Ford	<i>The Grapes of Wrath</i>
1942	<i>Mrs. Miniver</i> , M-G-M	John Ford	<i>How Green Was My Valley</i>
1943	<i>Casablanca</i> , Warner	William Wyler	<i>Mrs. Miniver</i>
1944	<i>Going My Way</i> , Paramount	Michael Curtiz	<i>Casablanca</i>
1945	<i>The Lost Weekend</i> , Paramount	Leo McCarey	<i>Going My Way</i>
		Billy Wilder	<i>The Lost Weekend</i>

	Actress		Actor
1928	Janet Gaynor	<i>Seventh Heaven</i>	Emil Jannings
1929	Mary Pickford	<i>Coquette</i>	Way of All Flesh
1930	Norma Shearer	<i>Divorcee</i>	Warner Baxter
1931	Marie Dressler	<i>Min and Bill</i>	In Old Arizona
1932	Helen Hayes	<i>Sin of Madelon Claudet</i>	George Arliss
1933	Katharine Hepburn	<i>Morning Glory</i>	Lionel Barrymore
1934	Claudette Colbert	<i>It Happened One Night</i>	Fredric March
1935	Bette Davis	<i>Dangerous</i>	Dr. Jekyll and Mr. Hyde
1936	Luise Rainer	<i>The Great Ziegfeld</i>	Charles Laughton
1937	Luise Rainer	<i>The Good Earth</i>	Private Life of Henry VIII
1938	Bette Davis	<i>Jezebel</i>	Clark Gable
1939	Vivien Leigh	<i>Gone With the Wind</i>	<i>It Happened One Night</i>
1940	Ginger Rogers	<i>Kitty Foyle</i>	Victor McLaglen
1941	Joan Fontaine	<i>Suspicion</i>	The Informer
1942	Greer Garson	<i>Mrs. Miniver</i>	Paul Muni
1943	Jennifer Jones	<i>Song of Bernadette</i>	The Story of Louis Pasteur
1944	Ingrid Bergman	<i>Gaslight</i>	Captains Courageous
1945	Joan Crawford	<i>Mildred Pierce</i>	Boys Town
			Goodbye, Mr. Chips
			Philadelphia Story
			Sergeant York
			Yankee Doodle Dandy
			Watch on the Rhine
			Going My Way
			The Lost Weekend

	Actress (supporting role)		Actor (supporting role)
1936	Gale Sondergaard	<i>Anthony Adverse</i>	Walter Brennan
1937	Alice Brady	<i>In Old Chicago</i>	Come and Get It
1938	Fay Bainter	<i>Jezebel</i>	Joseph Schildkraut
1939	Hattie McDaniel	<i>Gone With the Wind</i>	The Life of Emile Zola
1940	Jane Darwell	<i>The Grapes of Wrath</i>	Walter Brennan
1941	Mary Astor	<i>The Great Lie</i>	Kentucky
1942	Teresa Wright	<i>Mrs. Miniver</i>	Thomas Mitchell
1943	Katrina Paxinou	<i>For Whom the Bell Tolls</i>	Stage Coach
1944	Ethel Barrymore	<i>None But the Lonely Heart</i>	Walter Brennan
1945	Anne Revere	<i>National Velvet</i>	The Westerner
			How Green Was My Valley
			Johnny Eager
			Charles Coburn
			The More the Merrier
			Barry Fitzgerald
			Going My Way
			James Dunn
			A Tree Grows in Brooklyn

FORMS OF ADDRESS

To make the forms of address applicable to women as well as men, it is to be assumed that feminine titles may be used wherever masculine titles are shown:

Mrs. or Miss
Madam: or Dear Madam:
My dear Madam Secretary:
My dear Madam Commissioner:
My dear Madam Mayor:

Mr.
Sir: or Dear Sir:
My dear Mr. Secretary:
My dear Mr. Commissioner:
My dear Mr. Mayor:

FEDERAL GOVERNMENT OFFICIALS

Title	If personal name is not used (formal)	If personal name is used (informal)
The President	The President The White House Washington 25, D. C. My dear Mr. President:	The Honorable . . . (full name) The White House Washington 25, D. C. My dear President . . . :
	Oral: Mr. President	
The Vice President	The President of the Senate United States Senate Washington 25, D. C. Sir:	The Honorable . . . (full name) The Vice President of the United States Washington 25, D. C. My dear Mr. Vice President: My dear Mr. . . . (full name)
Cabinet Member	(formal, diplomatic) The Honorable The Secretary of . . . Washington 25, D. C. Sir:	(informal) The Honorable . . . (full name) Secretary of . . . Washington 25, D. C. My dear Mr. Secretary: My dear Mr. . . . :
	The Honorable The Attorney General Washington 25, D. C. Sir:	The Honorable . . . (full name) The Postmaster General Washington 25, D. C. My dear Mr. Postmaster Gen- eral My dear Mr. . . . :
	(business form) The Secretary of . . . Washington 25, D. C. Dear Sir:	or to an Administrator: My dear Mr. Administrator:
	Oral: Mr. Secretary	
The Speaker of the House	The Speaker of the House of Representatives Washington 25, D. C. Sir:	The Honorable . . . (full name) Speaker of the House of Rep- resentatives Washington 25, D. C. My dear Mr. Speaker: My dear Mr. . . . (full name)
Senator	Hon. . . . (full name) United States Senate Washington 25, D. C.	Hon. . . . (full name) United States Senate Street number City and State
	(alike for men and women) (alike in both formal and informal)	
	My dear Senator:	
	My dear Senator . . . (full name):	
	My dear Mr. (Mrs. or Miss) . . . (full name):	
	Dear Sir or Dear Madam (rare)	

Oral: Senator

Title	If personal name is not used (formal)	If personal name is used (informal)
Representative	Hon. . . . (full name) House of Representatives Washington 25, D. C.	Hon. . . . (full name) Representative in Congress Street number City and State
	(alike for men and women) (alike in both formal and informal)	
	My dear Congressman: (Congresswoman*)	
	My dear Mr. or Mrs. or Miss . . . :	
	Dear Sir or Dear Madam (rare)	

*The term "Congressman" seems likely to become general for both men and women, similar to "chairman," "spokesman," "juryman," etc.

JUDICIAL OFFICERS

The Chief Justice of the United States	The Chief Justice of the United States Washington 13, D. C.	The Honorable . . . (full name) Chief Justice of the U. S. Washington 13, D. C.
	My dear Mr. Chief Justice:	Mr. Chief Justice . . . (last name) Supreme Court of the U. S. Washington 13, D. C.
Associate Justice of the Supreme Court of the United States	My dear Mr. Chief Justice:	My dear Mr. Chief Justice: The Honorable . . . (full name) Justice, Supreme Court of the United States Washington 13, D. C. Mr. Justice . . . (last name) Supreme Court of the U. S. Washington 13, D. C. My dear Mr. Justice:

DIPLOMATIC REPRESENTATIVES

Ambassador	His Excellency The Ambassador of . . . Washington, D. C.	His Excellency Mr. or personal title Ambassador of . . . Washington, D. C.
	Sir: or My dear Mr. Ambassador:	Excellency: . . . (full name) . . . The American Ambassador Foreign Capital, Country
Minister or Envoy	Sir:	My dear Mr. Ambassador: My dear Mr. . . . : (personal)
	His Excellency The Minister of . . . Washington, D. C.	His Excellency Mr. or personal title Minister of . . . Washington, D. C.
	The Honorable The American Minister Foreign Capital, Country	The Honorable . . . (full name) . . . The American Minister Foreign Capital, Country
	Sir: or My dear Mr. Minister:	My dear Mr. Minister: My dear Mr. . . . : (personal)

STATE AND CITY OFFICIALS

Governor	The Governor or The Honorable The Governor of . . . State Capital, State	Hon. . . . (full name) Governor of . . . State Capital, State
	Sir:	My dear Governor: My dear Governor . . . (name): Dear Sir:

STATE AND CITY OFFICIALS—(cont.)

Title	If personal name is not used (formal)	If personal name is used (informal)
Lieutenant Governor	The Lieutenant Governor State of . . . State Capital, State	Hon. . . . (full name) Lieutenant Governor State of . . . State Capital, State
	Dear Sir:	Dear Sir: My dear Governor . . . : My dear Mr. . . . :
Heads of State De- partments	The Secretary of State The State Treasurer The Attorney General State of . . . State Capital, State Dear Sir:	Hon. . . . (full name) Secretary of State Hon. . . . (full name) State of . . . State Capital, State Dear Sir: My dear Mr. . . .
State Senator	Senator from . . . (district) The State Senate State Capital, State Dear Sir:	Hon. . . . (full name) The State Senate State Capital, State Dear Sir: My dear Senator: My dear Mr. . . .
State Assemblyman, Representative,	Assemblyman from . . . (dis- trict)	Hon. . . . (full name) The State Assembly
Chief Justice, Chief Judge, Presiding Judge, State Supreme Court or Court of Ap- peals	The Chief Justice Supreme Court of the State of . . . State Capital, State Dear Sir: Similarly to The Chief Judge The Presiding Judge	Hon. . . . (full name) Chief Justice of the Supreme Court My dear Chief Justice: Dear Sir: Similarly to
Associate Justice, Associate Judge, State Supreme Court Court of Appeals		Chief Judge, Presiding Judge My dear Judge . . . (name): Hon. . . . (full name) Associate Justice of the Su- preme Court State Capital, State My dear Justice . . . : Dear Sir:
Mayor	The Mayor of the City of . . . City, State Dear Sir: My dear Mr. Mayor:	Hon. . . . (full name) Mayor of the City of . . . Dear Sir: My dear Mayor:

CHURCH DIGNITARIES AND OFFICIALS

THE ROMAN CATHOLIC CHURCH

The Pope	His Holiness, The Pope Vatican City Rome, Italy	His Holiness Pope . . . (full name) Vatican City Rome, Italy
	Most Holy Father:	Most Holy Father:
Cardinal	His Eminence:	His Eminence (Christian name) Cardinal (surname) "His Eminence James Cardi- nal Brown
	Your Eminence:	Your Eminence:
Archbishop	Archbishop of . . . (diocese)	Most Reverend . . . (full name) Archbishop of . . . (diocese)
	Your Excellency:	Your Excellency:
Bishop	Bishop of . . . (diocese)	Most Reverend . . . (full name) Bishop of . . . (diocese)
	Your Excellency:	Your Excellency:

PROTESTANT EPISCOPAL CHURCH

Title	If personal name is not used (formal)	If personal name is used (informal)
Bishop	The Bishop of . . .	The Right Reverend . . . (name) Bishop of . . .
	My dear Bishop: Dear Sir:	My dear Bishop: My dear Bishop . . . :
Archdeacon	The Archdeacon of . . .	The Venerable . . . (full name) Archdeacon of . . .
	My dear Archdeacon:	My dear Archdeacon: My dear Archdeacon . . . :
Dean	The Dean of . . .	The Very Reverend . . . (full name) Dean of . . .
	My dear Dean:	My dear Dean: My dear Dean . . . :
Canon	The Canon of . . .	The Reverend . . . (full name) Canon . . .
	My dear Canon:	My dear Canon: My dear Canon . . . :
Rector	The Rector of . . .	The Reverend . . . (full name)
	My dear Sir:	My dear Mr. . . . : My dear Doctor . . . :

OTHER CHURCHES

Methodist Bishop	The Bishop of . . . Area The Methodist Church City, State	Bishop . . . (full name)
	My dear Bishop: Dear Sir:	My dear Bishop . . . : My dear Bishop:
Jewish Rabbi	The Rabbi of . . .	Rabbi . . . (full name) Dr. . . .
	My dear Rabbi:	My dear Rabbi:

MILITARY AND NAVAL OFFICERS AND ENLISTED MEN

Officers and enlisted men in the Army and Navy should be addressed by their titles rather than by "Mr." Titles of rank or rating are usually abbreviated in addresses. The business salutation for all ranks, rates and grades is: Dear Sir:

ARMY

My dear General . . . :
(similarly for Lt. Gen., Maj. Gen. and
Brig. Gen.)
My dear Colonel . . . :
(similarly for Lt. Colonel)
My dear Major . . . :

An Officer and His
Wife

Colonel and Mrs. . . (full
name)
Lieut. and Mrs. . . . (full
name)

Army or Navy Chap-
lain

The Chaplain of . . .
My dear Chaplain:

NAVY

My dear Admiral . . . :
(similarly for Vice Adm. and Rear Adm.)

My dear Captain . . . :

My dear Commander . . . :
(but not for Lt. Commander)

Captain and Mrs. . . . (full
name)
Lt. Comdr. and Mrs. . . . (full
name)
Lieut. (jg) and Mrs. . . . (full
name)

The Salutations are the same as those given under Salutations to Military and Naval Officers.

Chaplain . . . (full name)
My dear Chaplain:
My dear Chaplain . . . :
Dear Chaplain . . . :

SCIENTIFIC INVENTIONS AND DISCOVERIES

Source: Encyclopaedia Britannica.

DISCOVERIES AND INVENTIONS IN CHEMISTRY

- 1766—CAVENDISH. Discovery of "inflammable air" (hydrogen) as distinct substance and demonstration (1781) that it burned to form water.
- 1774—PRIESTLEY. Discovery of oxygen.
- 1783—LAVOISIER. First quantitative synthesis of water.
- 1803—DALTON. Atomic theory; laws of chemical combination.
- 1809—GAY-LUSSAC. Laws of gases.
- 1811—AVOGADRO. Molecular hypothesis.
- 1828—WÖHLER, LIEBIG. Synthesis of urea; foundation of organic chemistry.
- 1841—FARADAY. Induction of electric current.
- 1860—BUNSEN, KIRCHHOFF. Invention of the spectroscope.
- 1868—LOCKYER. Discovery of helium on the sun by use of spectroscope.
- 1869—MENDELEEV. Periodic table of elements, established families of elements.
- 1887—ARRHENIUS. Ionic theory of dissociation in solution.
- 1896—BECQUEREL. Radioactivity of uranium.
- 1899—CURIE. Discovery of radium.
- 1908—ONNES (Kamerlingh). Liquefaction of helium.
- 1912—LAUE, BRAGG. X-ray structures of crystals.
- 1913—MOSELEY. Atomic numbers.
- 1919—ASTON. Mass spectroscopy for separation of isotopes.
- 1932—UREY. Discovery of deuterium.
- 1934—JOLIO, CURIE. Artificial radioactivity.

INVENTIONS AND DISCOVERIES IN APPLIED CHEMISTRY

- 1650—GLAUBER. Manufacture of hydrochloric acid.
- 1839—GOODYEAR. Process for vulcanizing rubber.
- 1846—SCHÖNBEIN. Invention of gun cotton.
- 1856—BESSEMER. Air blast converter for manufacture of steel.
- 1858—HOFMANN. Discovered aniline in coal tar; aniline dyes.
- 1861—SOLVAY. Manufacture of soda from salt.
- 1862—NOBEL. Invention of dynamite.
- 1873—LINDE. Introduced ammonia refrigeration.
- 1886—HALL. Manufacture of aluminum by electrolytic action.
- 1891—FRASCH. Method for mining sulphur.
- 1908—BAKELAND. Phenol-formaldehyde resins (bakelite).
- 1913—HABER. Synthesis of ammonia from nitrogen and hydrogen.
- 1915—LANGMUIR. Tungsten filaments.
- 1923—MIDGLEY. Tetraethyl lead gasoline.
- 1930—CAROTHERS. Nylon plastic.
- 1930—IPATIEFF. High-octane gasoline.
- 1930—CAROTHERS and COLLINS. Neoprene, synthetic rubber.

DISCOVERIES AND INVENTIONS IN ELECTRICITY

- 1745—VON KLEIST. Leyden jar condenser.
- 1752—FRANKLIN. Lightning rod and the nature of lightning.
- 1791—GALVANI. Theory of animal electricity.
- 1800—VOLTA. Current electricity and electric battery.
- 1826—OHM. Laws of electrical resistance.
- 1828—HENRY. Electromagnetism and induction.
- 1831—FARADAY. Electromagnetic induction.
- 1832—MORSE. Electric telegraph perfected.
- 1832—GAUSS. System of absolute electric measurements.
- 1838—PAGE. Induction coil.
- 1870—GRAMME. First industrial dynamo.
- 1876—BELL. Telephone.
- 1878—CROOKES. Discovery of cathode ray.
- 1878—EDISON. First electric incandescent lamp.
- 1855—STANLEY. Electric transformer.
- 1892—TESLA. Alternating current motor.
- 1892—STEINMETZ. Laws of alternating current.
- 1895—ROENTGEN. Discovery of X-rays.
- 1896—MARCONI. Practical wireless.
- 1897—THOMSON. Isolation of the electron.
- 1904—FLEMING. First diode radio tube.
- 1907—DE FOREST. Triode radio tube.
- 1914—COOLIDGE. Tungsten filament lamp.
- 1925—BAIRD. Televisor, precursor of television.

MECHANICAL INVENTIONS AND DISCOVERIES

- 1769—WATT. Steam engine patented.
- 1783—MONTGOLFIER. Hot-air balloon.
- 1785—CARTWRIGHT. Power loom.
- 1786—REED. Machine-cut nails.
- 1787—FITCH. Steamboat.
- 1793—WHITNEY. Cotton gin; mass production of interchangeable gun parts, 1798.
- 1797—NEWBOLD. Cast-iron plow.
- 1807—FULTON. First successful steamboat.
- 1816—DAVY. Miner's safety lamp.
- 1829—STEPHENSON. First successful steam railroad.
- 1833—McCORMICK. Reaper.
- 1835—COLT. Revolver.
- 1837—ERICSSON. Screw propeller.
- 1846—HOE. Rotary printing press.
- 1846—HOWE. Sewing machine.
- 1852—OTIS. Improved power elevator.
- 1858—FIELD. Successful Atlantic cable.
- 1861—GATLING. Machine gun.
- 1868—SHOLES, GLIDDEN. Typewriter.
- 1869—WESTINGHOUSE. Air brake for railroads.
- 1877—EDISON. Phonograph.
- 1888—DUNLOP. Pneumatic tire.
- 1893—EDISON. Motion pictures.
- 1897—DIESEL. First successful heavy oil engine.
- 1903—WRIGHT BROTHERS. Airplane.
- 1905—SPERRY. Gyrocompass.
- 1909—BRÉGUET. Helicopter.

DISCOVERIES AND INVENTIONS IN PHYSICS

- 1687—NEWTON. Law of gravity.
- 1785—COULOMB. Fundamental laws of electrical attraction.
- 1798—THOMPSON (Baron Rumford). Mechanical theory of heat.
- 1815—FRESNEL. Diffraction of light.
- 1840—JOULE. Measurements of electric current.
- 1847—HELMHOLTZ. Law of conservation of energy.
- 1873—MAXWELL. Electromagnetic theory of light.
- 1896—BECQUEREL. Discovery of radioactivity.
- 1897—WILSON. Development of cloud chamber to detect subatomic particles.
- 1897—THOMSON. Discovery of electrons.
- 1901—PLANCK. Quantum theory.
- 1902—MICHELSON. Velocity of light.
- 1905—EINSTEIN. Special theory of relativity.
- 1911—RUTHERFORD. Theory of atomic nucleus.
- 1913—BOHR. Electron theory.
- 1924—DE BROGLIE. Wave nature of the electrons.
- 1931—LAWRENCE. Invention of the cyclotron.
- 1932—CHADWICK. Discovery of the neutron.
- 1932—ANDERSON. Discovery of the positron.
- 1934—FERMI. Use of slow neutrons in atom smashing.
- 1938—HAHN. Discovery of uranium fission.
- 1941—FERMI, *et al.* Atomic pile for generation of power.

DISCOVERIES IN PHYSIOLOGY AND MEDICINE

- 1628—HARVEY. Circulation of blood and function of the heart.
- 1665—HOOKE. First observation and naming of "cells."
- 1675—LEEUEWENHOEK. Observation of bacteria by microscope.
- 1688—REDI. All life comes from life.
- 1737—LINNAEUS. System for classifying plants and animals.
- 1768—SPALLANZANI. Disproved spontaneous generation.
- 1796—JENNER. Vaccination for smallpox.
- 1819—LAËNNEC. Invention of stethoscope.
- 1839—SCHWANN. All living matter composed of cells.
- 1842—LONG. First to use ether as anesthetic in surgery. (Jackson, Morton, and Long disputed first use of ether.)
- 1859—DARWIN. Evolution and theory of natural selection.
- 1865—MENDEL. Laws of heredity.
- 1867—LISTER. Antiseptic surgery.
- 1882—METCHNIKOV. Function of white blood corpuscles discovered.
- 1882—PASTEUR. Rabies preventive.
- 1882—KOCH. Tuberculosis bacteria discovered.
- 1892—WEISMANN. Developed theory of germ plasm in heredity.
- 1894—KITAZATO. Discovery of bacillus of plague.
- 1894—ROUX. Perfection of diphtheria antitoxin.
- 1897—ELJKMAN. Cause of beriberi, vitamin deficiency.
- 1900—REED, *et al.* Cause of yellow fever.

Discoveries in Physiology and Medicine—(cont.)

- 1900—DE VRIES. Nature of mutations and their role in heredity.
- 1901—TAKAMINE. Isolation of adrenaline, first hormone isolated.
- 1905—BINET. Intelligence tests.
- 1906—WASSERMANN, *et al.* Test for syphilis.
- 1907—SHULL. Development of hybrid corn.
- 1907—WILLSTÄTTER. Constitution of chlorophyll.
- 1908—FREUD. Doctrine of psychoanalysis.
- 1909—MORGAN. Theory of the gene and detailed mechanics of heredity.
- 1910—PAVLOV. Mechanism of the conditioned reflex.
- 1912—CUSHING. Relation of pituitary gland to growth.
- 1912—EHRlich. Salvarsan.
- 1913—GOLDBERGER. Cause and control of pellagra.
- 1913—SCHICK. Test of susceptibility to diphtheria.
- 1913—McCOLLUM. Isolation of vitamin A.
- 1922—BANTIN, MACLEOD. Insulin for treatment of diabetes.
- 1924—STEENBOCK. Production of vitamin D by ultraviolet irradiation.
- 1926—MINOT, WHIPPLE, and MURPHY. Liver treatment of anemia.
- 1932—DOMAGK. Sulfa drugs as bactericides.
- 1936—STANLEY. Molecular nature of viruses.
- 1946—DU VIGNEAUD. Synthetic penicillin.

Weights and Measures

Source: U. S. Bureau of Standards.

Fundamental Equivalents

In its original conception the meter was the fundamental unit of the metric system, and all units of length and capacity were to be derived directly from the meter which was intended to be equal to one ten-millionth of the earth's quadrant. Furthermore, it was originally planned that the unit of mass, the kilogram, should be identical with the mass of a cubic decimeter of water at its maximum density. At present, however, the units of length and mass are defined independently of these conceptions.

The International Prototype Meter is kept at the International Bureau of Weights and Measures. By definition the meter now bears no definite relation to the earth's quadrant, but is the length of a certain platinum-iridium bar when supported in a definitely specified manner, at the temperature of melting ice, and at standard atmospheric pressure (760 millimeters of mercury). The kilogram is independently defined as the mass of a definite platinum-iridium standard, the International Prototype Kilogram, which is also kept at the International Bureau of Weights and Measures. The liter is defined as the volume of a kilogram of water, at standard atmospheric pressure, and at the temperature of its maximum density, approximately 4° C. The meter is thus the fundamental unit on which are based all metric standards and measurements of length and area, and of volumes derived from linear measurements.

A supplementary definition of the meter in terms of the wave length of light was adopted provisionally by the Seventh General (International) Conference on Weights and Measures, in 1927. According to this definition, the relation* for red cadmium light waves under specified conditions of temperature, pressure, and humidity is

$$1 \text{ meter} = 1,553,164.13 \text{ wave lengths.}$$

This corresponds to a wave length (cadmium red) of

$$6438.469 \times 10^7 \text{ millimeters}$$

The kilogram is the fundamental unit on which are based all metric standards of mass. The liter is a secondary or derived unit of capacity or volume. The liter is larger by about 27 parts per million than the cube of the tenth of the meter, i.e., the cubic decimeter—that is, 1 liter=1.000027 cubic decimeters.

The conversion tables which involve the relative length of the yard and meter are based upon the relation:

$$1 \text{ meter} = 39.37 \text{ inches,}$$

contained in the act of Congress of 1866†. From this relation it follows that 1 inch=25.40005 millimeters (nearly).

In recent years engineering and industrial interests the world over have urged the adoption of the simpler relation, 1 inch=25.4 millimeters exactly, which differs from the preceding value by only 2 parts in a million. This simpler relation has not as yet been officially adopted by either Great Britain or the United States, but is in wide industrial use‡.

*J. R. Benoit, C. Fabry, and A. Perot, Nouvelle détermination du rapport des longueurs d'onde fondamentales avec l'unité métrique. Trav. et Mém. Bur. Int. Poids et Mesures 15, 131 (1913).

†United States Code, title 15, sec. 205.

‡Conversion tables (ASA B48.1—1933), computed on the basis of 1 inch=25.4 mm. exactly, may be obtained from the American Standards Association, New York, N. Y.

Units of Weights and Measures

The supplementary metric units are formed by combining the words "meter", "gram", and "liter" with the six numerical prefixes.

Prefixes and their meanings

m.	milli —one-thousandth	(0.001)
c.	centi —one-hundredth	(0.01)
d.	deci —one-tenth	(0.1)
	(the unit equals 1)	
dk.	deka —ten	(10)
h.	hecto —one hundred	(100)
k.	kilo —one thousand	(1,000)

Land area

ha.	hectare
a.	are
ca.	centare

Area

1 are	100 square meters
1 hectare	10,000 square meters

Metric units

m.	meter (for length)
gm.	gram (for weight or mass)
l.	liter (for capacity)

Area (square)

km. ²	kilometer
hm. ²	hectometer
dkm. ²	dekameter
m. ²	meter
dm. ²	decimeter
cm. ²	centimeter
mm. ²	millimeter
μ ²	micron

Volume (cubic)

km. ³	kilometer
hm. ³	hectometer
dkm. ³	dekameter
m. ³	meter
dm. ³	decimeter
cm. ³	centimeter
mm. ³	millimeter
μ ³	micron

Length

km.	kilometer
hm.	hectometer
dkm.	dekameter
m.	meter
dm.	decimeter
cm.	centimeter
mm.	millimeter
μ	micron (0.001mm.)
mμ	millimicron

Weight

kg.	kilogram
hg.	hectogram
dkg.	dekagram
gm.	gram
dg.	decigram
cg.	centigram
mg.	milligram

Capacity of containers

kl.	kiloliter	l.	liter
hl.	hectoliter	dl.	deciliter
dkl.	dekaliter	cl.	centiliter
		ml.	milliliter

Length

Fundamental Units

A meter (m.) is a unit equal to the distance between the defining lines on the International Prototype Meter when this standard is at the temperature of melting ice (0°C).

A yard (yd.) is a unit of length equal to $\frac{3600}{3937}$ of a meter.

Multiples and Submultiples

1 kilometer (km.)	=1000 meters
1 hectometer (hm.)	= 100 meters
1 dekameter (dkm.)	= 10 meters
1 decimeter (dm.)	=0.1 meter
1 centimeter (cm.)	=0.01 meter
1 millimeter (mm.)	=0.001 meter
1 micron (μ.)	=0.000001 meter=0.001 millimeter
1 millimicron (mμ.)	=0.000000001 meter=0.001 micron
1 angstrom (A.)	$\left\{ \begin{array}{l} =0.0000001 \text{ millimeter} \\ =0.0001 \text{ micron} \\ =.1 \text{ millimicron} \end{array} \right.$
1 statute mile	$\left\{ \begin{array}{l} =8 \text{ furlongs}=320 \text{ rods} \\ =1760 \text{ yards or } 5280 \text{ feet} \end{array} \right.$
1 furlong	= $\frac{1}{8}$ mile=40 rods=220 yards=660 feet
1 rod	=5 $\frac{1}{2}$ yards=16 $\frac{1}{2}$ feet=25 links
1 foot	= $\frac{1}{3}$ yard=12 inches
1 hand	=4 inches
1 inch	=1/36 yard=1/12 foot
1 line (button)	=1/40 inch
1 point (printers)	=1/72 inch
1 mil	=1/1000 inch
1 chain (Gunter's)	=4 rods=22 yards=66 feet=100 links
1 link (Gunter's)	=1/100 chain=7.92 inches
1 U. S. nautical mile	$\left\{ \begin{array}{l} 1853.248 \text{ meters}=6080.20 \text{ feet} \end{array} \right.$
1 sea mile	
1 geographical mile	
1 international nautical mile	=1852 meters=6076.10 feet
1 fathom	=6 feet=8 spans
1 span	= $\frac{1}{8}$ fathom=9 inches

Mass

Fundamental Units

A kilogram (kg.) is a unit of mass equal to the mass of the International Prototype kilogram.

A gram (g.) is a unit of mass equal to one-thousandth of the mass of the International Prototype Kilogram.

An avoirdupois pound (lb. avdp.) is a unit of mass equal to 0.4535924277 kilogram.

A troy pound (lb. t.) is a unit of mass equal to $\frac{5760}{7000}$ of that of the avoirdupois pound.

Multiples and Submultiples

- 1 metric ton (t.)=1000 kilograms
- 1 hectogram (hg.)= 100 grams
- 1 dekagram (dkg.)= 10 grams
- 1 decigram (dg.)= 0.1 gram
- 1 centigram (cg.)= 0.01 gram
- 1 milligram (mg.)= 0.001 gram
- 1 metric carat (c.)= 200 milligrams=0.2 gram

1 avoirdupois ounce (oz. avdp.)=1/16 avoirdupois pound=437.5 grains

1 avoirdupois dram (dr. avdp.)=1/256 avoirdupois pound=1/16 avoirdupois ounce
1 grain (grain)=1/7000 avoirdupois pound=1/5760 troy pound

1 apothecaries' pound (lb. ap.)=1 troy pound= $\frac{5760}{7000}$ avoirdupois pound

1 apothecaries' or troy ounce (oz. ap. or $\frac{3}{8}$ oz. t.)=1/12 troy pound= $\frac{480}{7000}$ avoirdupois pound
=480 grains

1 apothecaries' dram (dr. ap. or $\frac{3}{8}$)=1/96 apothecaries' pound= $\frac{1}{8}$ apothecaries' ounce=60 grains

1 pennyweight (dwt.)=1/20 troy ounce=24 grains

1 apothecaries' scruple (s. ap. or $\frac{1}{3}$)= $\frac{1}{3}$ apothecaries' dram=20 grains

1 short hundredweight (sh. cwt.)=100 avoirdupois pounds

1 long hundredweight (1 cwt.)=112 avoirdupois pounds

1 short ton (sh. tn.)=2000 avoirdupois pounds

1 long ton (1 tn.)=2240 avoirdupois pounds

Capacity

A liter is a unit of capacity equal to the volume occupied by the mass of 1 kilogram of pure water at its maximum density (at a temperature of 4° C., practically) and under the standard atmospheric pressure (of 760 mm.). It is equivalent in volume to 1.000027 cubic decimeters.

A gallon (gal.) is a unit of capacity equal to a volume of 231 cubic inches. It is used for the measurement of liquid commodities only.

A bushel (bu.) is a unit of capacity equal to the volume of 2150.42 cubic inches. It is used in the measurement of dry commodities only.

- 1 kiloliter 1000 liters (1 stere)
- 1 hectoliter 100 liters
- 1 dekaliter 10 liters
- 1 deciliter 0.1 liter
- 1 centiliter 0.01 liter

Conversion Factors

To change	To	Multiply by
millimeters	inches	0.03937
meters	feet	3.2808
meters	yards	1.0936
kilometers	miles	0.62137
cubic meters	cubic yards	1.3079
liters	liquid quarts	1.0567
liters	gallons (U. S.)	0.2642
hectoliters	bushels	2.8378
kilograms	pounds avdp.	2.2046
hectares	acres	2.4710
metric tons	tons (2000 lb.)	1.1023
metric tons	long tons	.9842
inches	millimeters	25.4
feet	meters	0.3048
yards	meters	0.9144
miles	kilometers	1.60935
cubic yards	cubic meters	0.7646
pounds avdp.	kilograms	0.4536
liquid quarts	liters	0.9463
gallons	liters	3.7853
bushels	hectoliters	0.3524
acres	hectares	0.4047
tons (2000 lb.)	metric tons	0.9072
Long tons (2240 lb.)	metric tons	1.0160

PARSEC: A unit of measure for interstellar space equal to a distance of 3.26 light years or about 19,200,000,000 (trillion) miles, a unit used by astronomers.

Common English Measures

Length

12 inches	=1 foot
3 feet	=1 yard
5½ yards	=1 rod
40 rods	=1 furlong
5,280 feet	} =1 statute mile
1,760 yards	
320 rods	
8 furlongs	} =1 nautical mile
6,080.20 feet	
4 inches	
6 feet	=1 fathom

Weight

Avoirdupois

7,000 grains (gr.)	=1 pound (lb.)
16 ounces	=1 pound
14 pounds	=1 stone
100 pounds	=1 hundredweight
2,000 pounds	=1 ton
2,240 pounds	=1 long ton

Troy

24 grains	=1 pennyweight
20 pennyweights	=1 ounce (troy)
12 ounces (troy)	} =1 pound (troy)
5,760 grains	

Apothecaries

20 grams	=1 scruple
3 scruples	=1 dram
8 drams	=1 ounce
12 ounces	=1 pound

Area

144 square inches	=1 square foot
9 square feet	=1 square yard
30¼ square yards	=1 square rod
43,560 square feet	} =1 acre
4,840 square yards	
160 square rods	
640 acres	=1 square mile

Volume

1,728 cubic inches	=1 cubic foot
27 cubic feet	=1 cubic yard
128 cubic feet	=1 cord

Capacity—Liquid

16 fluid ounces	=1 pint
4 gills	=1 pint
2 pints	=1 quart
4 quarts	=1 gallon

Capacity—Dry

2 pints	=1 quart
8 quarts	=1 peck
4 pecks	=1 bushel

Other Equivalents

1 mile	= { 8 furlongs	1 liquid quart = 57.75 cubic in.
	63,360 inches	1 liquid pint = 28.875 cubic in.
	1,760 yards	1 liquid gill = 7.21875 cubic in.
1 square yard	= 1,296 square in.	1 fluid ounce = 1.805 cubic in.
1 pint	= 16 fluid ounces	1 peck = 537.605 cubic in.
1 quart	= 57.8 cubic in.	1 dry quart = 67.2 cubic in.
1 U. S. gallon	= 231 cubic in.	1 dry pint = 33.6 cubic in.
1 Imperial gal.	= 277.418 cubic in.	1 board foot = 144 cu. in. (12×12×1)
1 bushel	= 32 quarts (dry)	1 cord = 128 cu. ft. (4×4×8)
1 ounce	= .91 ounce (troy)	1 barrel (dry, other than cranberry) = 105 dry qts. (7056 cu. in.)
1 ton	= .89 long ton	1 cranberry barrel = 5826 cubic inches
1 long ton	= 1.12 ton	

Other Units

CUBIT: now 18 inches long, supposed to have been the length from the elbow to the tip of the middle finger.

FATHOM: now a measure of length, 6 feet, used chiefly in measuring the depth of water.

HAND: a measure equal to a hand's breadth, 4 inches, used in measuring the height of horses.

KNOT: a unit of speed equivalent to one nautical mile, 6080.20 feet per hour.

LEAGUE: a varying measure of distance, but in English speaking countries usually three miles.

MAGNUM: a two-quart bottle, usually for champagne or certain other spirits.

MIL: a unit used in measuring the diameter of wire, being one one-thousandth of an inch.

STONE: an English weight of 14 lb.; influencing the United States in selling a barrel of flour weighing 196 lb. or 14 stone.

Chemical Elements

Source: Professor Philip S. Chen, Atlantic Union College.

Atomic number	Element	Symbol	Atomic weight 1943	Density gm. cc	Melting point °C.	Boiling point °C.	Valence*	Number of isotopes†	Discoverer	Date dis- covered
1	Hydrogen	H	1.0080	0.07†	-259.1 ₄	-252.7	1	2-3	Cavendish	1766
2	Helium	He	4.003	0.15†	< -272.2	-268.9	0	1	Ramsay	1895
3	Lithium	Li	6.940	0.534	186.	> 1200.	1	2	Arfvedson	1817
4	Beryllium (Glucium)	Be	9.02	1.84	1350.	1500.	2	1	Vauquelin	1798
5	Boron	B	10.82	2.535§	2300.	2500.	3	2	Gay-Lussac and Thenard; Davy	1808
6	Carbon	C	12.010	2.25**	> 3500.	4200.	2, 3 or 4	2	Prehistoric	....
7	Nitrogen	N	14.008	0.810†	-209.8 ₆	-195.8	3 or 5	2	Rutherford	1772
8	Oxygen	O	16.0000	1.14†	-218.4	-183.00	2	3	Priestley	1774
9	Oxygen	F	19.00	1.14†	-223.	-187.	1	1	Moissan	1886
10	Neon	Ne	20.183	0.90035 (g/10°C. 76 Omm)	-248.67	-245.9	0	3	Ramsay and Travers	1898
11	Sodium	Na	22.997	0.9287†	97.5	880.	1	1	Davy	1807
12	Magnesium	Mg	24.32	1.741	651.	1110.	2	3	Davy	1808
13	Aluminum	Al	26.97	2.699†	660.0	1800.	3	1	Wohler	1827
14	Silicon	Si	28.06	2.42**	1420.	2600.	4	3	Berzelius	1824
15	Phosphorus	P	30.98	1.83 (white)	44.1	280.	3 or 5	1	Brand	1669
16	Sulfur	S	32.06	2, 0-1	112.8	444.6	2, 4 or 6	3	Prehistoric	....
17	Chlorine	Cl	35.457	1.507†	-101.6	-34.6	1, 3, 5 or 7	2	Scheele	1774
18	Argon	A	39.944	1.4233†	-189.2	-185.7	0	3	Rayleigh and Ramsay	1894
19	Potassium	K	39.096	0.87	62.3	760.	1	3	Davy	1807
20	Calcium	Ca	40.08	1.54	810.	1170.	2	4	Davy	1808
21	Scandium	Sc	45.10	3.62(10°C.)	1200.	2400.	3	1	Nilson	1879
22	Titanium	Ti	47.90	4.5	1800.	> 3000.	3 or 4	5	Gregor	1791
23	Vanadium	V	50.95	5.69	1710.	3000.	2, 3, 4 or 5	1	Sefstrom	1830
24	Chromium	Cr	52.01	6.92	1615.	2200.	2, 3 or 6	4	Vauquelin	1798
25	Manganese	Mn	54.93	7.42	1260.	1900.	2, 3, 4, 6, or 7	1	Gahn	1774
26	Iron	Fe	55.85	7.85-88	1535.	3000.	2, 3 or 6	4	Prehistoric	....
27	Cobalt	Co	58.94	8.9	1480.	2900.	2 or 3	1	Brandt	1735
28	Nickel	Ni	58.69	8.60-90	1452.	2900.	2 or 3	5	Cronstedt	1751
29	Copper	Cu	63.57	8.30-95	1083.	2300.	1 or 2	2	Prehistoric	....
30	Zinc	Zn	65.38	7.04-16	419.4 ₃	907.	2	5	Marggraf	1746
31	Gallium	Ga	69.72	5.903	29.7 ₅	> 1600.	2 or 3	2	Boisbaudran	1875
32	Germanium	Ge	72.60	5.46	958.5	2700.	4	5	Winkler	1886
33	Arsenic	As	74.91	5.73	814.3atm.	615.	3 or 5	1	Albertus Magnus	1250††
34	Selenium	Se	78.96	4.3-8	220.	688.	2, 4 or 6	6	Berzelius	1818
35	Bromine	Br	79.916	3.12†	-7.2	58.7 ₈	1, 3, 5 or 7	2	Balard	1826
36	Krypton	Kr	83.7	2.16†	-169.	-151.8	0	6	Ramsay and Travers	1898
37	Rubidium	Rb	85.48	1.532	38.6	700.	1	2	Bunsen and Kirchoff	1861
38	Strontium	Sr	87.63	2.50-58	800.	1150.	2	3	Davy	1808
39	Yttrium	Y	88.92	3.80	1490.	2600.	3	1	Gadolin	1794
40	Zirconium	Zr	91.22	6.44	1700.	> 2900.	4	5	Klaproth	1789
41	Columbian	Cb	92.91	8.4	1950.	> 3300.	3 or 5	1	Hatchett	1801
42	Molybdenum	Mo	95.95	9.01	2620±10	3700.	2, 3, 4, 5, or 6	6	Hjelm	1781
43	Masurium	Ma	(98.)	.....	2(900).	.....	2, 3, 4 or 6 ..	..	Noddack and Berg	1925
44	Ruthenium	Ru	101.7	12.06	2450.	> 2700.	3, 4, 6 or 8	6-7	Klaus	1844
45	Rhodium	Rh	102.91	12.44	1955.	> 2600.	3	1	Wollaston	1803
46	Palladium	Pd	106.7	12.16 (20°C.)	1555.	2200.	2 or 4	..	Wollaston	1803
47	Silver	Ag	107.880	10.503††	960.5	1950.	1	2	Prehistoric	....
48	Cadmium	Cd	112.41	8.648	320.9	767.	2	8	Stromeyer	1817
49	Indium	In	114.76	7.28	155.	1460.	1 or 3	2	Reich and Richter	1863
50	Tin	Sn	118.70	7.29	231.8 ₃	2260.	2 or 4	10	Prehistoric	....
51	Antimony	Sb	121.76	6.618	630.5	1380.	3 or 5	2	Prehistoric	....
52	Tellurium	Te	127.61	6.25**	452.	1390.	2, 4, or 6	7-8	von Richenstein	1782
53	Iodine	I	126.92	4.94	113.5	184.3 ₅	1, 3, 5 or 7	1	Courtois	1811
54	Xenon	Xe	131.3	3.52†	-140.	-109.1	0	9	Ramsay and Travers	1898

Chemical Elements—(cont.)

Atomic number	Element	Symbol	Atomic weight 1943	Density gm./cc	Melting point °C.	Boiling point °C.	Valence*	Number of isotopes†	Discoverer	Date discovered
55	Cesium	Cs	132.91	1.873	26.	670.	1	1	Bunsen and Kirchhoff	1860
56	Barium	Ba	137.36	3.78	850.	1140.	2	4	Davy	1808
57	Lanthanum	La	138.92	6.5	824.	1800.	3	1	Mosander	1839
58	Cerium	Ce	140.13	6.9	640.	1400.	3 or 4	2	Klaproth; Berzelius and Hisinger	1803
59	Praseodymium	Pr	140.92	6.475	940.	.....	3, 4, or 5	1	Auer von Welsbach	1885
60	Neodymium	Nd	144.27	6.96	840.	.....	3	5	Auer von Welsbach	1885
61	Illinium	Il	(146.)	.....	.....	.....	(3)	..	Hopkins and Harris	1926
62	Samarium	Sm	150.43	7.7-8	1300.	.....	2 or 3	7	Boisbaudran	1879
63	Europium	Eu	152.0	.....	.....	.....	2 or 3	2	Demarcay	1901
64	Gadolinium	Gd	156.9	.....	.....	.....	3	5	Marignac	1880
65	Terbium	Tb	159.2	.....	.....	.....	3	1	Mosander	1843
66	Dysprosium	Dy	162.46	.....	.....	.....	3	4	Boisbaudran	1886
67	Holmium	Ho	164.94	.....	.....	.....	3	1	Soret	1878
68	Erbium	Er	167.2	7.77 (?)	.....	.....	3	4	Mosander	1843
69	Thulium	Tm	169.4	.....	.....	.....	3	1	Cleve	1879
70	Ytterbium	Yb	173.04	.....	.....	.....	3	5	Marignac	1878
71	Lutecium	Lu	174.99	.....	.....	.....	3 or 4	1	Urbain	1907
72	Hafnium	Hf	178.6	13.3	1700.	3200.	4	5	Coster and von Hevesy	1923
73	Tantalum	Ta	180.88	16.6	2850.	4100.	3 or 5	1	Ekeberg	1802
74	Tungsten	W	182.92	18.6-19.1	3370.	5900.	2, 4, 5 or 6	4	d'Elhuyar	1783
75	Rhenium	Re	186.31	20.53 (20°C.)	3000.	.....	4	2	Noddack and Berg	1925
76	Osmium	Os	190.2	22.5	2700.	5300.	2, 3, 4, or 8	6	Tennant	1804
77	Iridium	Ir	193.1	22.42	2350.	4800.	3 or 4	2	Tennant	1804
78	Platinum	Pt	195.23	21.37	1755.	4300.	2 or 4	5	De Ulloa	1748
79	Gold	Au	197.2	19.3††	1063.0	2600.	1 or 3	1	Prehistoric	.....
80	Mercury	Hg	200.61	13.596†	-38.8;	356.90	1 or 2	9	Prehistoric	.....
81	Thallium	Tl	104.39	11.86	303.5	1650.	1 or 3	2	Crookes	1861
82	Lead	Pb	207.21	11.347††	327.5	1620.	2 or 4	4-7	Prehistoric	.....
83	Bismuth	Bi	209.00	9.80	271.	1450.	3 or 5	1	Geoffroy	1753
84	Polonium	Po	210.0	.....	.....	.....	.....	.....	Cuie	1898
85	(Alabamine)	Ab	(221.)	.....	470.	.....	1, 3, 5, or 7	..	Allison and Murphy	1931
86	Radon	Rn	(222.)	9.739†	-71.	-61.8	0	..	Dorn	1900
87	(Virginium)	Vi	(224.)	.....	24.	.....	1	..	Allison	1929
88	Radium	Ra	226.05	(5)	900.	1140.	2	..	Curie	1898
89	Actinium	Ac	(231)§§	.....	.....	.....	..	..	Debiere	1899
90	Thorium	Th	232.12	11.13	1840.	3000.	4	1	Berzelius	1828
91	Protoactinium	Pa	231.	.....	.....	.....	..	..	Hahn and Meitner	1917
92	Uranium	U	238.07	18.7	1850.	.....	3, 4, or 6	4ck	Klaproth	1789
93	Neptunium	Np	237.	.....	.....	.....	..	2ck	McMillan and Abelson	1940
94	Plutonium	Pu	238.	.....	.....	.....	..	2ck	Seaborg et al	1940
95	Americium	Am	241.	.....	.....	.....	..	..	Seaborg et al	.....
96	Curium	Cm	242.	.....	.....	.....	..	..	Seaborg et al	.....

*VALENCE is a measure of the extent to which an atom is able to combine directly with others.

†ISOTOPES are one of two or more elements having same atomic number identical in chemical behavior. Because of their differences in mass, isotopes may be distinguished in the mass spectrophotograph and in band spectra. Now becoming increasingly important in chemical observations and discoveries of new elements and properties.

†Liquid. §Amorphous. ¶Graphite. **Crystalline. ††Compressed. ‡Cast. §§1939 atomic weight. ¶¶Exact date doubtful—born 1193 and died 1280. < Is less than. > Is greater than.

Figures in parentheses are tentative or theoretical.

Note that the number of isotopes of each element is increasing by discovery or by manufacture.

PHYSICAL CHEMISTRY: Josiah Willard Gibbs (1839-1903), Professor of Mathematical Physics at Yale, by his formulation of the "Phase Rule" and his "On the Equilibrium of Heterogeneous Substances" founded physical chemistry.

ORGANIC CHEMISTRY: Although others had experimented in organic chemistry, the origin of this branch may be ascribed to Friedrich Wöhler who synthesized urea, an organic compound, from ammonium cyanate, an inorganic in 1828.

Patents

The issuance of a patent is a contract between the United States government and the inventor which grants a monopoly on the manufacture, sale and proceeds of the invention exclusively to the inventor for a term not exceeding 17 years. To obtain the patent, the inventor must have produced some "new and useful art, machine, manufacture, or composition of matter, or some new and useful improvement thereof." In return for the monopoly or patent right, the inventor must present to the Patent Office full specifications and diagrams so that the invention or composition or process can be reproduced by other persons following the specifications. Should the inventor omit some point, however irrelevant, in his specifications or drawings in order to conceal his secret, the patent may be declared invalid.

An application for a patent must contain the following: a petition, addressed

to the commissioner of patents accompanied by a fee of \$30.00; a carefully prepared specification sheet describing the invention or composition; a drawing, if possible; a certified statement under oath that the applicant believes the invention to be new and that it was made or discovered by him. If the application is granted, the patent is awarded; an additional fee of \$30.00 is collected; and the specifications are published and furnished on request to the general public.

Applications are considered strictly in the order in which they are received. Patents are not granted for printed matter, for methods of doing business, or on devices for which claims contrary to natural laws are made. The applications for a perpetual motion machine are numerous but until a working model is presented that actually fulfills the conditions of the claim, no patent has been or will be issued.

Copyrights

A copyright, international or national, is the right obtained by authors, musicians, radio-script writers, and artists of all mediums to prevent the reproduction of their works without their consent. The United States Constitution (Article I, Section 8) empowers Congress to "promote the progress of science and the useful arts, by securing for limited times to authors and inventors the exclusive right to their respective writings and discoveries." The possession of a copyright prevents reproduction by writing, printing, copying or imitation of the copyrighted article. This includes such works as motion picture or stage plots, characters or settings, any type of script in whole or in part of a radio production. The term "writing" has been defined to include maps, charts, music, prints, engravings, drawings, paintings, designs, photographs, photoplays, radio scripts, legitimate stage plays as well as books or any form of written or printed matter.

The first copyright statute went into effect in 1790; the present law has been on the books since 1909 and was amended in

1912. A copyright is good for 28 years on application with a corresponding renewal right for another 28 years if the renewal application is made within one year of the date of expiration. The copyright of a book or similar publication is obtained by marking each book with the word "copyright" together with the name of the owner of the copyright and the year of publication. This appears on the title page or the one immediately after it. After publication the copyright must be registered by forwarding to the Register of Copyrights, Washington, D. C., a petition for a copyright, a fee of Two Dollars (\$2.00), two copies of the best edition of the book (to be deposited in the Library of Congress), and an affidavit that the typesetting, printing, and binding have been done within the United States.

Citizens of all countries which grant reciprocal copyrights to Americans, which include most of the important literate nations, may, by international agreement, obtain copyright protection in the United States. Americans likewise receive copyrights effective in these countries.

Trade-marks

A trade-mark may be defined as a word, letter, device, symbol, or some combination of these, used in connection with merchandise, and pointing distinctly to the origin or ownership of the article to which it is applied.

Certificates of registration of trade-marks are issued under the seal of the Patent Office and may be registered by the owner if domiciled within the United States, including all territory under the jurisdiction and control of the United States. An American citizen who resides in any foreign country which by treaty or law reciprocates

similar privileges can register in the United States the trade-marks used in the products of the foreign factory.

General jurisdiction in trade-mark cases is given to the Federal Courts. Decisions of examiners on applications or oppositions are subject to appeal to the Commissioner of Patents, and from him to the Court of Appeals for the District of Columbia. In many cases, a trade-mark infringes unwittingly upon earlier trade-marks.

The maximum protection given by registration is 20 years, after which registration must again be made by application.

The Races of Mankind

by Professor Wilton Marion Krogman, Dept. of Anthropology, University of Chicago.

Classification of Man into groups called "races" rests upon the basic fact that all peoples belong to the same genus and species, *Homo sapiens*. This is important to keep in mind, for it implies that all peoples are much more alike than different.

Scientists classify Man by using a number of physical traits, most of them based upon observation rather than upon precise measurement. Examples of these are stature and head-form (determined by a breadth/length ratio), skin color, hair color, form and texture, eye color, nose shape, mouth form, shape of face with special reference to cheek-bones. Other criteria, such as arm and leg proportions, are more specialized. Two things are noteworthy here: (1) most of the physical traits are external; (2) physical traits are so variable that a single trait has virtually no diagnostic value.

We may define a *race*, simply, as a subgroup of Mankind more or less set apart by a combination of physical traits.

There are three, possibly four, great aggregates of races, usually called *stocks*: Caucasoid, Mongoloid, Negroid, and Archaic Caucasoid (or Australoid). The first three are often referred to as "White," "Yellow," and "Black." This is not really correct; peoples of North-Central India are Caucasoids, yet their skin-color is brown to dark-brown; certain tribes of Northeast Africa are Negroids, yet their skin-color is light-brown to brown. Variability also may be seen in stature: the tallest people in the world are found in Denmark and the Scottish Highlands, in East Africa, and in southernmost South America—respectively Caucasoid, Negroid, and Mongoloid. It must be re-emphasized that not one or two traits, but an aggregate of traits, of genetic origin, provides the only valid method of setting up stock or racial classification.

Caucasoids are the peoples of Europe, the adjacent shores of North Africa, and of Asia Minor and the northern half of India. The following races belong to the Caucasoid stock: Nordic, or Northwest European, Alpine or Central European, Mediterranean or Southwest European, Baltic or Northeast European, Dinaric or Southeast European, Armenoid in western Asia Minor, and Indio (often called Hindu) in North-Central India. These races are not, of course, absolutely limited to those geographical areas. For example, the Mediterranean race is found also in North Africa, especially Egypt, and in Asia Minor, where it is represented by the Beduin Arabs of Arabia. Other Caucasoid peoples are the Magyars, the Finns, and the Lapps, who show traces of Mongoloid mixtures, especially the last.

The Negroids are the peoples of Africa and Oceania, termed respectively the African Negroids and the Oceanic Negroids. The following African Negroid races are commonly recognized: Forest or West African or "True" Negro in West Africa, Sudanic in Central Africa, Nilotic in East Africa, Hamitic in Northeast and North Africa, Bantu (better Bantu-speaking) in South Africa, and Bushman-Hottentot in the Kalahari Desert of South Africa. The Oceanic Negroids are commonly called Melanesian or Papuan, and are found chiefly in Borneo, New Caledonia, the Solomons, the Hebrides and Fiji.

Of special interest among Negroids are Pygmies, who average about four feet in stature. They are found in Africa in the Congo region, in the Ituri Forest, and in Oceania on the Andaman Islands, the Malay Peninsula, the Philippines, and Borneo.

The Mongoloids are basically the peoples of Asia, but are also in the Western Hemisphere as the American Indians, and are represented in Malaysia and in Oceania. The Mongoloids are usually divided into the following races: Sinic of China and Japan, Palearctic of Siberia, Turkic and Tungic or Mongolic of Central Asia, and Malayan of Malaysia. In the Western Hemisphere they are found as Eskimos and the Indians of the Americas. In Polynesia, i.e., in Samoa, Tonga, Hawaii and west to Easter Island, the Mongoloid stock is a basic element, with some Caucasoid and some Negroid (Melanesian?) admixture.

The Archaic Caucasoids are found in Australia as the Australian aborigines and in Japan as the Ainu. They may possibly be an element in Melanesia and in Ceylon and South India, e.g., the Toda, the Vedda, and other tribes.

This is a brief survey of the "stocks" and "races" of the world. There is much inter-mixing and some over-lapping. This leads to two very important biological observations: 1) *there are no pure races*; 2) *there are no superior or inferior races*. We know from history that all peoples, upon contact, have crossed their genetically-based physical traits. We know from human anatomy that in fundamental structure all peoples are identical.

As far as biological Man is concerned, what he is is related to his cultural environment, rather than to any innate (or inherited) ability or aptitude. There is no "German race," only a German nationality; there is no "Jewish race," only a Jewish socio-religious community; there is no "Aryan race," only an Aryan language; there is no "master race," only a political bombast!

RELIGION

RELIGIONS OF THE WORLD

Religion	Area of greatest concentration	Estimated number of adherents	Percentage of world population
Roman Catholic	Italy, France, United States	315,000,000	15.
Orthodox Eastern (including Greek and Russian Orthodox)	U. S. S. R. and eastern Mediterranean	117,700,000	5.
Protestant	United States, Great Britain, Germany	235,000,000	11.
Jewish	Europe	15,800,000	1.
Mohammedan	India, Netherlands East Indies, northern Africa	285,000,000	13.
Shinto	Japan	16,000,000	1.
Hindu	India	239,000,000	11.
Sikh	India	4,000,000	.2
Bain	India	1,000,000	.05
Buddhist and Lamaist	China, Japan, Tibet	165,000,000	8.
Confucianist and Taoist	China	285,000,000	13.
Primitive, Animist, Fetishist and Magic	Nigeria, India and Netherlands East Indies	210,000,000	9.
All others, including state religions		275,500,000	12.75

CHURCH MEMBERSHIP IN THE UNITED STATES

Source: Yearbook of American Churches.

1943-1944

	No. churches local reported	Inclusive membership	Membership 13 years of age and over*
Roman Catholic Church.....	14,791	23,419,701	17,330,558
Old Catholic Churches.....	54	10,836	8,634
Eastern Orthodox Churches.....	834	686,287	502,730
Jewish Congregations.....	3,728	4,641,184	3,341,652
"Protestant" Groups over 50,000.....	212,336	41,943,104	36,942,911
Other Groups.....	22,019	1,791,557	1,590,622
Total.....	253,762	72,492,669	59,717,107

The summary of latest official reports of church membership, reveals a total of 72,492,669 persons, the highest ever reported. On July 1, 1944, the total population of the continental United States was estimated by the Bureau of the Census to be 138,100,874 persons. The total reported for church membership in 1943-1944 is 52.5 percent of the total population, the highest ever reported. In 1890 the proportion of church membership to population was 22.2 percent. The proportion of church membership officially reported has steadily increased since 1890. The Decennial Church Census, carried out under a 1929 Act of Congress, will not be undertaken until early in 1947.

*In many cases estimated.

History of Leading Religious Groups in the United States

Source: Yearbook of American Churches.

Advent Christian Church.—A branch of the original Adventist group, which, under Jonathan Cummings, withdrew and organized in 1861. This group held to the belief in the utter extinction of the wicked after the resurrection.

Seventh Day Adventists.—This body developed out of the Adventist movement (1833-1844), which emphasized the imminent personal return of Jesus Christ. It emphasized the observance of the seventh-day Sabbath and in 1863 was numerous enough to organize a conference. At present it has twelve world divisions and carries on extensive publishing and medical work.

Assemblies of God.—Independent, pentecostal, evangelical, missionary churches associated for cooperative effort in district and general councils. Organized in Arkansas in 1914.

Northern Baptist Convention.—The early historical local independency of Baptist churches in America tended to impede the formation of any general organization until in 1814 a General Missionary Convention was formed to permit Baptists to express themselves in terms of missionary activities. In 1845, the state conventions in the South withdrew to organize the Southern Baptist Convention. In 1907, the Northern Baptist Convention was organized, a delegated body under whose direction the many agencies of the Baptists in the North and West now operate.

Southern Baptist Convention.—In 1845, Southern Baptists withdrew from the General Missionary Convention over the question of slavery and other matters and formed the Southern Baptist Convention.

National Baptist Convention, U.S.A., Inc.—The older and parent convention of Negro Baptists. This body is to be distinguished from the National Baptist Convention of America, usually referred to as the "unincorporated" body. The "incorporated" Convention is a constituent member of the Federal Council of the Churches of Christ in America.

National Baptist Convention of America.—This is a body usually referred to as the "unincorporated" convention, not to be confused with the "incorporated" National Baptist Convention, U.S.A., Inc., from which this body withdrew in 1916.

American Baptist Association.—A group of independent Missionary Baptist churches in the Southwest, organized into an association in 1905. They adhere strictly to the

apostolic order of church polity and cooperation.

Colored Primitive Baptists.—A group of Negro Baptists opposed to all forms of church organization.

Free Will Baptists.—This is a body of Arminian Baptists centering in North Carolina, where the first church of this group was organized in 1727.

General Baptists.—An Arminian group of Baptists, first organized in England in 1611, later, in 1714, transplanted to Virginia, and found today in the Middle West.

National Baptist Evangelical Life and Soul Saving Assembly of U.S.A.—Organized in 1921 by A. A. Banks as a charitable, educational, and evangelical organization.

Primitive Baptists.—A large group of Baptists, largely through the South, who are opposed to all centralization, to modern missionary societies, and to Sunday schools. They are sometimes called "antimissionary" Baptists.

The United American Free Will Baptist Church.—A body which set up its organization in 1901. Though ecclesiastically distinct, they are in close relations with the Free Will Baptists.

Church of the Brethren (Conservative Dunkers).—German pietists from Crefeld, Germany, under the leadership of Peter Becker, entered the colonies in 1719, and settled at Germantown, Philadelphia, Pa. They were called Dunkers (baptizers) and were immersionists. The members are conservative as to attire, oaths or affirmations, resistance to force, temperance, and the like.

Buddhist Churches of America.—This body, established in Utah in 1942, represents Buddhism in this country, the faith based on "the anatman doctrine, supplemented by the idea of karma, and nirvana, the holy ease or a blissful mental state of absolute freedom from evil."

Christian and Missionary Alliance.—An evangelistic and missionary movement, organized by the Rev. A. B. Simpson, in New York, in 1887. It stresses "the deeper Christian life and consecration to the Lord's service."

Church of Christ, Scientist.—A church founded by Mary Baker Eddy in 1879 to restore the healing power of original Christianity. As defined by Mrs. Eddy, religion is the scientific system of divine healing.

Church of God.—This body, to be differentiated from the Church of God with

headquarters at Anderson, Ind., is a holiness group and pentecostal. It began in 1866 in Tennessee, under the name of Christian Union, reorganized in 1902 as the Holiness Church. In 1907 it adopted the name above.

Church of God (Anderson, Ind.).—This group is one of the largest of the groups which have taken the name "Church of God." Its headquarters are at Anderson, Ind. It originated about 1880 and emphasizes Christian unity.

Church of God and Saints of Christ.—A Negro body organized in Kansas by William S. Crowdy, who taught that the Negro people are descendants of the ten lost tribes of Israel. His followers consequently observe the Old Testament feast days and use Hebrew names for the months.

Church of God in Christ.—Organized in Kansas in 1895, by C. P. Jones and C. H. Mason, who believed there was no salvation without holiness; incorporated 1897.

Church of the Nazarene.—One of the larger holiness bodies, organized in Chicago, October 1907. It is in general accord with the early doctrines of Methodism and emphasizes entire sanctification.

Churches of Christ.—This body is made up of a large group of churches, formerly reported with the Disciples of Christ, but since the religious census of 1906, reported separately. They are strictly congregational and have no organization larger than the local congregation. They are very conservative and do not collect or furnish statistics.

Churches of God in North America (General Eldership).—This group emerged out of a revival movement among the Germans in Pennsylvania in 1825, under the leadership of John Weinbrenner, a German Reformed minister. The Bible is the only rule of faith and practice.

Congregational Christian Churches.—Congregational churches date back to the Pilgrim Fathers and the early colonists of New England in 1620. The Christian churches date back to the Wesleyan and revival movements at the end of the eighteenth century. These two groups of churches were merged at Seattle, Wash., in 1931.

Disciples of Christ.—In the revival period of the early nineteenth century, a movement under Thomas Campbell and his son, Alexander, resulted in the establishment of a Fellowship called Christians or Disciples. Believing that sects are unscriptural, they are biblicists and immersionists.

Greek Orthodox Church (Hellenic).—Greek-speaking Orthodox Christians have been scattered parishes in the U.S. for the past seventy years. These were first under the jurisdiction of the Metropolitan of Athens and later under the Patriarchate of Constantinople. Political changes in Europe

have been reflected in this country and have brought difficulties in all branches of the Orthodox Church. In 1931, a general convention held in New York City under the presidency of Archbishop Athenagoras brought a large measure of unity and order.

Russian Orthodox Church.—The Russian Orthodox Church entered Alaska in 1792 before its purchase by the United States. In 1872, its headquarters were moved to San Francisco and in 1905 to New York.

Serbian Orthodox Church.—This body of the Eastern Orthodox Church, formerly under Russian jurisdiction, now has a diocese of its own.

Ukrainian Orthodox Church of America.—Organized in 1928, when the first convention was held. The Rt. Rev. Bishop Bohdan was consecrated by order of Oecumenical Patriarchate of Constantinople, in 1937.

Evangelical and Reformed Church.—This body was formed on June 26, 1934, at Cleveland, Ohio, by a union of the Evangelical Synod of North America and the Reformed Church in the United States. The union was unique in that it left all details to be adjusted afterwards. The constitution was declared in effect at the General Synod, which met at Lancaster, Pa., in June 1940. The merged boards were organized and on February 1, 1941, took over the work carried on by the two former denominations.

Evangelical Church.—This group had its beginning in the evangelistic movement of the early Nineteenth century. Its founder was Jacob Albright. The first classes formed in 1800 and the Church itself was organized in 1807. In doctrine this group is Arminian and in government Methodistic. In November, 1946, this church merged with the Church of the United Brethren in Christ to form the Evangelical United Brethren Church.

Evangelical United Brethren Church.—See Evangelical Church and the Church of the United Brethren in Christ.

Religious Society of Friends (Five Years Meeting).—In 1902, twelve of the fourteen yearly meetings of Friends entered into a loose confederation, forming the Five Years Meeting. Two of the original meetings (Kansas and Oregon) have withdrawn. Ohio and Philadelphia never joined. Together, however, these yearly meetings and the Five Years Meeting form what is known as the Orthodox group of Friends.

Independent Fundamental Churches of America.—Organized in 1930, at Cicero, Ill., by representatives of various independent churches.

Jehovah's Witnesses.—Jehovah's Witnesses are Christians not identified with any sect or denomination. They are associated with the corporations known as the Watch Tower Bible & Tract Society, Incorporated.

porated, and International Bible Students Association. Jehovah's Witnesses have groups in practically all cities throughout the United States, as well as in other parts of the world, for the purpose of regular Bible study. They do not keep a membership roll, nor do they compile any census regarding attendance at their meetings.

Jewish Congregations.—Jews arrived in the colonies before 1650. The first congregation is recorded in 1656, in New York City, the Shearith Israel (Remnant of Israel).

Church of Jesus Christ of Latter-Day Saints.—A group in which the Bible, the Book of Mormon, the Doctrine and Covenants and the Pearl of Great Price are regarded as the word of God. The primitive church organization is sought and the same gifts of tongues, prophecy, revelation, visions, healings and interpretation of tongues are continued.

Reorganized Church of Jesus Christ of Latter-Day Saints.—A division among the Latter-Day Saints (Mormons) occurred on the death of Joseph Smith in 1844. His son, Joseph Smith, became presiding officer of this group which has established headquarters at Independence, Mo.

American Lutheran Church.—This Church is a constituent body of the American Lutheran Conference. It is itself the result of the merger in 1930 of the Evangelical Lutheran Joint Synod of Ohio and Other States (org. 1918), the Evangelical Lutheran Synod of Iowa and Other States (org. 1854), and the Lutheran Synod of Buffalo (org. 1845).

Evangelical Lutheran Augustana Synod of North America.—This group, whose constituency originally was of Swedish extraction, is a member of the American Lutheran Conference. Organized in 1860.

Norwegian Lutheran Church of America.—In 1917, the United Norwegian Church, the Norwegian Synod, and the Hauge Synod united under the above name. In 1930, the group became a constituent part of the American Lutheran Conference.

Lutheran Free Church.—This group was organized in 1897 as the result of differences of opinion in the United Norwegian Church over the control of the Augsburg Seminary. It became a constituent part of the American Lutheran Conference in 1930.

United Danish Evangelical Lutheran Church in America.—This group was organized in 1896, the union of two Danish Lutheran groups, the Danish Church Association, and the Danish Church in North America. In 1930 it became a constituent part of the American Lutheran Conference.

Evangelical Lutheran Synod of Missouri, Ohio, and Other States.—This group, the largest constituent part of the Synodical Conference, was organized in 1847, holds to an unwavering confessionalism and is

the leader in the conservative group among the Lutherans.

The Evangelical Lutheran Joint Synod of Wisconsin and Other States.—This group, a constituent part of the Synodical Conference, was organized in Wisconsin in 1851.

United Lutheran Church in America.—This group dates back to the Ministerium of Pennsylvania, organized in 1748, and beyond that to early colonial days. It represents the union of the General Synod, the General Council, and the United Synod of the South in 1918.

The General Conference of the Mennonite Church of North America.—This is the oldest Mennonite conference in the U.S. and next to the largest numerically. It was organized in 1860 in Iowa.

Mennonite Church.—The largest group of the Mennonites, who began arriving in the U.S. in 1683, settling in Germantown, Pa. They derive their name from Menno Simons, their outstanding leader, born 1492.

African Methodist Episcopal Church.—This group was formed in Philadelphia in 1816 and extended throughout the South after the Civil War.

African Methodist Episcopal Zion Church.—This group broke away from the Methodist Episcopal Church and organized in 1821, setting up its own first conference in Philadelphia.

Colored Methodist Episcopal Church.—In 1870, the General Conference of the M.E. Church, South, approved the request of its colored membership for the formation of their conferences into a separate ecclesiastical body.

Free Methodist Church of North America.—This group grew out of a movement in the Genessee Conference of the Methodist Episcopal Church about 1850 toward more original Methodism. Organized in 1860.

The Methodist Church.—In April 1939 the Uniting Conference forming The Methodist Church was held by representatives of the Methodist Episcopal Church, the Methodist Episcopal Church, South, and the Methodist Protestant Church. The Methodist Church in the United States originated with the efforts of John and Charles Wesley, leaders of the revival movements in England in the eighteenth century. Methodist emigrants from Ireland planted Methodism in America about 1760. In 1771 Francis Asbury, one of Wesley's preachers, later a Bishop, landed in Philadelphia. The Methodist Episcopal Church was organized in 1784-85. The Methodist Episcopal Church, South, dates from 1846, the separation from the Methodist Episcopal Church having taken place over the slavery issue. The Methodist Protestant Church dates from 1830, and was organized over the issue of lay representation.

Moravian Church (Unitas Fratrum).—In 1734, Moravian missionaries of the pre-Reformation faith of John Huss came to Georgia and in 1740 to Pennsylvania. They established the Moravian Church, which is broadly evangelical, liturgical, with an episcopacy as a spiritual office and in form of government "confidential."

Pentecostal Church of God in America.—Organized in 1919 at Chicago, the first national convention was held in October 1940.

Polish National Catholic Church.—After a long period of dissatisfaction with Roman Catholic Administration in many Polish parishes, this group was organized in 1904.

Colored Cumberland Presbyterian Church.—In 1869, the Negro churches of the Cumberland Presbyterian Church were set apart by the General Assembly with their own ecclesiastical organization.

Cumberland Presbyterian Church.—In 1806, a presbytery (Cumberland) of the Presbyterian Church was dissolved by the Synod of Kentucky on account of its attitude toward revivalism. Members of the presbytery organized as an independent body in 1810 and became the Cumberland Presbyterian Church. When this body attempted to reunite with the Presbyterian Church in 1906, a minority preferred to continue as an independent church as above.

Presbyterian Church in the U.S.—This group is the branch of the Presbyterian Church which separated from the main body at the time of the Civil War. It is often called the "Southern" Presbyterian Church.

Presbyterian Church in the United States of America.—This group, distinguished by its representative form of government and its Calvinistic theology, appeared among the earliest colonists of America. Its first church was established about 1640 and its first presbytery in 1706.

United Presbyterian Church of North America.—This group dates back to the Reformed Presbyterian (Covenanter) Church (1643) and the Associate Presbyterian Church (Seceder) Church (1733), both of Scotland. These two groups appeared in America in 1774 and 1753 respectively. They reunited and became the Associate Reformed Presbyterian Church in 1782. A minority, however, continued as the Associate Presbyterian Church. In 1858 the two groups reunited and became the United Presbyterian Church.

The Protestant Episcopal Church.—This group entered the colonies with the earliest settlers (Jamestown, Va., 1607), as the Church of England. It became autonomous and adopted its present name in 1789.

Christian Reformed Church.—A group of Dutch Calvinists which dissented from the

Reformed Church in America in 1857 and which was strengthened by later accessions from the same source and by immigration.

Reformed Church in America.—This group was established by the earliest Dutch settlers of New York as the Reformed Protestant Dutch Church in 1628. It embraces many of the historic early colonial churches of New York and New Jersey and today has many strong churches in the middle and far west.

The Roman Catholic Church.—The largest single group of Christians in the U.S., the Roman Catholic Church is under the spiritual leadership of Pope Pius XII. This group dates back to the priests who accompanied Columbus on his second voyage to the New World. A settlement, later discontinued, was made at St. Augustine, Fla. The continuous history of this Church in the colonies began at St. Mary's in 1634, in Maryland.

The Salvation Army.—An evangelistic organization, with a military government, first set up by General William Booth (1829-1912) in England and introduced into America in 1880.

Evangelical Mission Covenant Church of America.—A transplantation of a free church to the U.S. in 1885. Until recently the name has been the Swedish Evangelical Mission Covenant Church.

International General Assembly of Spiritualists.—Organized in Buffalo, N. Y. in 1936 for the purpose of chartering Spiritualist churches.

Triumph of the Church and Kingdom of God in Christ.—Organized in 1902 in Georgia by Elder D. Smith, emphasizing sanctification and the second coming of Christ.

Unitarian Churches.—The Unitarian movement in Congregationalism, beginning in the eighteenth century, produced the American Unitarian Association in 1825. In 1865 a national conference was organized.

Church of the United Brethren in Christ.—Under the leadership of Philip William Otterbein, a German Reformed minister, and Martin Boehm, a Mennonite, an evangelistic movement among the Germans in Pennsylvania resulted in the establishment of this body in 1800. In November, 1946, this church joined with the Evangelical Church to form the Evangelical United Brethren Church.

The Universalist Church of America.—This group originated in the United States about 1785. "The bond of fellowship in this church as adopted at Washington in 1935 shall be a common purpose to do the will of God as Jesus revealed it and to cooperate in establishing the Kingdom for which He lived and died."

Religious Groups with 50,000 Members and Over, 1944

Source: Yearbook of American Churches.

97.4 percent of the church membership is reported in the following table. The remaining 2.6 percent of the membership is found in 201 groups.

Name of religious group	No. churches reported	Inclusive church membership	Membership 13 years of age and over
Assemblies of God.....	5,055	227,349	227,349
Baptist groups:			
Northern Baptist Convention.....	7,348	1,555,914	1,478,111††
Southern Baptist Convention.....	25,965	5,667,926	5,384,530
National Baptist Convention, U.S.A., Inc.....	24,460	4,021,618	3,700,078††
National Baptist Convention of America.....	7,286	2,352,339	2,117,091††
American Baptist Association*.....	1,064	115,022	93,955
Free Will Baptists†.....	1,102	118,871	117,130††
National Baptist Evangelical Life and Soul Saving Assembly of U.S.A.....	451	59,743	48,137
Primitive Baptists*.....	1,726	69,157	68,881
United American Free Will Baptist Church.....	350	75,000	66,000
Buddhist Churches of America.....	46	70,000	52,000
Church of the Brethren.....	1,019	180,287	176,100
Church of Christ, Scientist*.....	2,113	268,915	268,915
Churches of God: Church of God.....	1,817	67,137	67,137
Church of God (Anderson, Ind.)†.....	1,412	83,875	71,293††
Church of God in Christ.....	2,000	300,000	250,000
Church of the Nazarene.....	2,965	187,082	187,082
Churches of Christ*.....	3,815	309,551	309,551††
Congregational Christian Churches§.....	5,753	1,075,401	1,075,401
Disciples of Christ.....	7,917	1,672,354	1,504,115††
Eastern Orthodox Churches: Greek Orthodox Church (Hellenic).....	280	250,000	200,000††
Russian Orthodox Church†.....	300	300,000	200,000††
Evangelical and Reformed Church§.....	2,835	675,958	675,958
Evangelical Church¶.....	1,994	255,881	249,241
Federated Churches*.....	508	88,411	88,093
Religious Society of Friends (Five Years Meeting).....	453	70,000	58,350††
Independent Fundamental Churches of America.....	600	60,000	60,000††
Jewish Congregations*.....	3,728	4,641,184	3,341,652††
Latter Day Saints: Church of Jesus Christ of Latter Day Saints.....	1,757	870,346	728,665
Reorganized Church of Jesus Christ of Latter Day Saints.....	563	113,064	102,071
Lutherans (American Lutheran Conference):			
American Lutheran Church.....	1,834	584,499	413,289
Evangelical Lutheran Augustana Synod of N. A.§.....	1,123	373,163	279,530
Norwegian Lutheran Church of America§.....	2,522	595,034	422,383
Lutheran Synodical Conference of N. A.:			
Evangelical Lutheran Synod of Missouri, Ohio, and Other States.....	4,073	1,356,655	948,371
Evangelical Lutheran Joint Synod of Wisconsin and Other States§.....	914	324,492	191,008
The United Lutheran Church in America§.....	3,762	1,690,204	1,213,985
Mennonite Church.....	500	51,813	50,000
Methodist Groups:			
African Methodist Episcopal†.....	7,265	868,735	667,035
African Methodist Episcopal Zion Church†.....	2,252	489,244	382,316
Colored Methodist Episcopal Church.....	4,400	382,000	321,000
The Methodist Church.....	41,067	8,046,129	7,400,000††
Polish National Catholic Church.....	146	250,000	200,000
Presbyterian Groups:			
Cumberland Presbyterian Church.....	1,048	64,984	44,786††
Presbyterian Church in the U. S.....	3,500	565,853	519,157††
Presbyterian Church in the U. S. A.....	8,462	2,040,399	1,960,399
United Presbyterian Church of North America.....	847	193,637	174,273††
The Protestant Episcopal Church.....	7,894	2,227,524	1,501,777
Reformed Groups: Christian Reformed Church.....	310	128,914	71,831
Reformed Church in America.....	736	169,390	169,390
Roman Catholic Church.....	14,791	23,419,701	17,330,558††
The Salvation Army.....	1,474	208,329	91,664
Seventh Day Adventists.....	2,531	194,832	194,832
International General Assembly of Spiritualists**.....	236	100,000	100,000
Unitarian Churches.....	364	62,593	62,593
United Brethren in Christ¶.....	2,748	433,480	390,132
Total (55).....	231,481	70,623,989	58,067,201

*1936. †1940. ‡1942. §1943. **1945. ††Estimated. [Merged Nov. 1946.

The Church of England

The history of the Christian Church in England begins with St. Augustine, who was sent to England in A.D. 597 by Pope Gregory the Great to convert the Saxons

Christianity. At that time, Canterbury was the capital of the kingdom of Kent. King Ethelbert gave the missionaries permission to preach in his kingdom, as his queen was a Christian princess of France. Converting the king to Christianity, Augustine was given by the pope the title of Archbishop of Canterbury and Primate of England. An old Roman temple was destroyed as the first Cathedral. This was burned down in 1067, and after a second fire in 1174, the present Cathedral was started.

Archbishop Becket was murdered in the cathedral in 1170 and buried behind the altar. He was canonized as St. Thomas of Canterbury and pilgrims came from all

over England to worship at the shrine erected to him in the rebuilt cathedral. Chaucer, in his "Canterbury Tales," writes of such a pilgrimage. The pilgrims rode at an easy pace called a Canterbury gallop, from which we get the word "canter."

Until 1534, during the reign of Henry VIII, the Church of England remained obedient to the Pope and to medieval traditions. At that time Parliament passed the Act of Supremacy, which decreed that the king and his successors should be the head of the Church of England. Thomas Cranmer was named the first protestant primate. Queen Elizabeth made the separation from Rome final. The King James version of the Bible, which is still the translation used by all English-speaking Protestants, was published in 1611. Canterbury has remained the see of the Church to this date.

Archbishops of Canterbury

Sequence	Name	Year created	Sequence	Name	Year created
1	Augustine	597	40	Thomas Becket	1162
2	Laurentius	604	41	Richard (of Dover)	1174
3	Mellitus	619	42	Baldwin	1185
4	Justus	624	43	Hubert Walter	1193
5	Honorius	627	44	Stephen Langton	1207
6	Deusdedit	655	45	Richard le Grant (of Wetharshed)	1220
7	Theodorus	668	46	Edmund Rich	1234
8	Beorhtweald	693	47	Boniface of Savoy	1245
9	Tatwine	731	48	Robert Kilwardby	1273
10	Nothhelm	735	49	John Pecham (Peckham)	1279
11	Cuthbeorht	740	50	Robert Winchelsey	1294
12	Breguwine	761	51	Walter Reynolds	1313
13	Jaenbeorht	765	52	Simon Mepeham	1328
14	Aethelheard	793	53	John Stratford	1333
15	Wulfred	805	54	Thomas Bradwardine	1349
16	Feologild	832	55	Simon Islip	1349
17	Ceolnoth	833	56	Simon Langham	1366
18	Aethelred	870	57	William Whittlesey	1368
19	Plegmund	890	58	Simon Sudbury	1375
20	Aethelhelm	914	59	William Courtenay	1381
21	Wulfhelm	923	60	Thomas Arundel	1396
22	Oda	942	61	Roger Walden	1398
23	Aelfsige	959	62	Thomas Arundel (restored)	1399
24	Beorhthelm	959	63	Henry Chichele	1414
25	Dunstan	960	64	John Stafford	1443
26	Aethelgar	988	65	John Kemp	1452
27	Sigeric Serio	990	66	Thomas Bourchier	1454
28	Aelfric	995	67	John Morton	1486
29	Aelfheah	1005	68	Henry Dean	1501
30	Lyfing	1013	69	William Warham	1503
31	Aethelnoth	1020	70	Thomas Cranmer	1533
32	Eadsige	1038	71	Reginald Pole	1556
33	Robert (Champart) of Jumieges	1051	72	Matthew Parker	1559
34	Stigand	1052	73	Edmund Grindal	1575
35	Lanfranc	1070	74	John Whitgift	1583
36	Anselm	1093	75	Richard Bancroft	1604
37	Ralph d'Escures	1114	76	George Abbot	1611
38	William de Corbeil	1123	77	William Laud	1633
39	Theobald	1130	78	William Juxon	1660

Sequence	Name	Year created	Sequence	Name	Year created
79	Gilbert Sheldon	1663	90	Charles Manners-Sutton	1805
80	William Sancroft	1678	91	William Howley	1828
81	John Tillotson	1691	92	John Bird Sumner	1848
82	Thomas Tenison	1695	93	Charles Thomas Longley	1862
83	William Wake	1716	94	Archibald Campbell Tait	1868
84	John Potter	1737	95	Edward White Benson	1883
85	Thomas Herring	1747	96	Frederick Temple	1896
86	Matthew Hutton	1757	97	Randall Thomas Davidson	1903
87	Thomas Secker	1758	98	Cosmo Gordon Lang	1928
88	Frederick Cornwallis	1768	99	William Temple	1942
89	John Moore	1783	100	Geoffrey Francis Fisher	1945

Bishops of the Protestant Episcopal Church

Source: Yearbook of American Churches.

(Note: MB—Missionary Bishop; CO—Coadjutor; S—Suffragan)

The Right Rev. Henry Knox Sherrill, of Boston, Presiding Bishop.

- Alabama: Charles C. J. Carpenter, 2015 Sixth Ave. N., Birmingham.
- Alaska: John Boyd Bentley, The Bishop's Lodge, Nenana, Alaska.
- Albany: George Ashton Oldham, 29 Elk St., Albany, N. Y.
- Arkansas: Richard Bland Mitchell, 509 Scott St., Little Rock.
- Atlanta: John Moore Walker, 108 E. 17 St., Atlanta, Ga.
- Bethlehem: Frank William Sterrett, Bishop's House, Bethlehem, Pa.
- California: Karl Morgan Block, 1055 Taylor St., San Francisco.
- Chicago: Wallace E. Conkling; Edwin J. Randall (S); 65 E. Huron St., Chicago, Ill.
- Colorado: Fred Ingle, 1313 Clarkson St., Denver.
- Connecticut: Frederick Grandy Budlong; Walter Henry Gray (S); 207 Farmington Ave., Hartford.
- Cuba: Alex Hugo Blankenship, Calle 18, No. 154, Vedado, Havana.
- Dallas: Henry Tunis Moore, 5100 Ross Ave., Dallas, Tex.
- Delaware: Arthur R. McKinstry, Bishopstead, Wilmington.
- Easton: William McClelland, Bishop's House, Easton, Md.
- Eau Claire: William W. Horstick, 510 S. Farwell St., Eau Claire, Wis.
- Erie: Harold E. Sawyer, 323 W. Sixth St., Erie, Pa.
- Florida: Frank Alex Juhan, 324 Market St., Jacksonville.
- (South): John Durham Wing, Bishopstead, Winter Park.
- Fond du Lac: Harwood Sturtevant, 75 W. Division St., Fond du Lac, Wis.
- Georgia: Middleton Stuart Barnwell, Christ Church, Savannah.
- Harrisburg: J. Thomas Heistand, 321 N. Front St., Harrisburg, Pa.
- Honolulu: Harry S. Kennedy (MB), Queen Emma Square, Honolulu, Hawaii.
- Idaho: Frank Archibald Rhea (MB), Box 985, Boise.
- Indiana (Northern): Reginald Mallett, 710 Lincoln Way E., Mishawaka, Ind.
- Indianapolis: Richard A. Kirchoffer, 1537 Central Ave., Indianapolis, Ind.
- Iowa: Elwood L. Haines, Cathedral Close, Davenport.
- Kansas: Goodrich Robert Fenner, Bethany Grounds, Topeka.
- Kentucky: Charles Clingman, 421 S. Second St., Louisville.
- Lexington: William Robert Moody, Main St. and Bell Ct., Lexington, Ky.
- Long Island: James Pernette DeWolfe, The Cathedral House, Garden City, N. Y.; John Insley Blair Larned* (S), 170 Remsen St., Brooklyn, N. Y.
- Los Angeles: William Bertrand Stevens; Robert Burton Gooden (S), 615 S. Figueroa St., Los Angeles, Calif.
- Louisiana: John Long Jackson, 509 International Bldg., New Orleans.
- Maine: Oliver Leland Loring, 143 State St., Portland.
- Maryland: Noble C. Powell, 105 W. Monument St., Baltimore.
- Massachusetts: Henry Knox Sherrill, 155 Beacon St., Boston; Raymond Adams Heron (S), 1 Joy St., Boston.
- (Western): William Appleton Lawrence, 37 Chestnut St., Springfield.
- Michigan: Frank Whittington Creighton; Richard S. M. Emrich (S), 63 E. Hancock Ave., Detroit.
- (Northern): Herman R. Page, 503 E. Arch St., Marquette.
- (Western): Lewis Bliss Whittemore, 134 N. Division St., Grand Rapids.
- Milwaukee: Benjamin F. Price Ivins, 804 E. Juneau Ave., Milwaukee, Wis.
- Minnesota: Stephen Edwards Keeler; Benjamin T. Kemmerer (S), 1111 Nicollet Ave., Minneapolis.
- Mississippi: Duncan M. Gray, P. O. Box 953, Jackson.
- Missouri: William Scarlett, 1210 Locust St., St. Louis. (West): Robert Nelson Spencer, 415 W. 13 St., Kansas City.

*To become Bishop of the European Churches, Rome, Italy, Dec. 31, 1946.

- Montana: Henry H. Daniels, 9 Kohrs Block, Helena.
- Nebraska: Howard R. Brinker, 1111 City National Bank Bldg., Omaha.
(West): Howard R. Brinker (Provisional), 1111 City Nat. Bk. Bldg.
- Nevada: William Fisher Lewis (MB), 505 Ridge St., Reno.
- Newark: Benjamin M. Washburn; Theodore R. Lullow (S), 24 Rector St., Newark, N. J.
- New Hampshire: John Thomson Dallas, 63 Green St., Concord.
- New Jersey: Wallace John Gardner, 808 W. State St., Trenton.
- New Mexico: James Moss Stoney (MB), 318 W. Silver Ave., Albuquerque.
- New York: William Thomas Manning;* Charles Kendall Gilbert (S), Synod House, 110 St. & Amsterdam Ave., N. Y.
(Central): Malcolm Endicott Peabody, 437 James St., Syracuse. (Western): Cameron Josiah Davis, 237 North St., Buffalo.
- North Carolina: Edwin Anderson Penick, Hillsboro and St. Mary's Sts., Raleigh.
(East): Thos. Campbell Darst, 510 Orange St., Wilmington, N. C.
(Western): Robert Emmett Gribbon, 60 Ravenscroft Drive, Asheville.
- North Dakota: Douglass Henry Atwill (MB), 206 Eighth St., S., Fargo.
- Ohio: Beverly Dandridge Tucker, 2241 Prospect Ave., Cleveland.
(Southern): Henry Wise Hobson, 412 Sycamore St., Cincinnati.
- Oklahoma: Thomas Casady, P. O. Box 1091, Oklahoma City.
- Olympia: Simeon Arthur Huston, 808 American Bank Bldg., Seattle, Wash.
- Oregon: Benjamin Dunlap Dagwell, 541 Morgan Rd., Portland.
(Eastern): William Proctor Remington (MB), 613 S.E. Byers St., Pendleton.
- Panama Canal Zone: Reginald G. Gooden, Jr., P. O. Box 3435 Ancon, Canal Zone.
- Pennsylvania: Oliver J. Hart, 202 S. 19 St., Philadelphia, Pa.
- Philippine Islands: Norman S. Binsted (MB), 567 Calle Isaac Peral, Manila; Robert Franklin Wilner (S), 555 Calle Isaac Peral.
- Pittsburgh: Austin Pardue, 325 Oliver Ave., Pittsburgh, Pa.
- Puerto Rico: Charles F. Boynton (MB), Box 1729, San Juan, P. R.
- Quincy: William Leopold Essex, 601 Main St., Peoria, Ill.
- Rhode Island: James DeWolfe Perry,* 10 Brown St., Providence; Granville G. Bennett (S), 32 Westminster St., Providence.
- Rochester: Bartel H. Reinheimer, 210 Hiram Sibley Bldg., Rochester, N. Y.
- Sacramento: Archie W. N. Porter, 2600 Capitol Ave., Sacramento, Calif.
- Salina: Shirley H. Nichols, P. O. Box 345, Salina, Kans.
- San Joaquin: Francis D. Walters (MB), 1209 N. St., Fresno, Calif.
- South Carolina: Thomas N. Carruthers, 142 Church St., Charleston.
(Upper): John James Gravatt, Trinity Parish House, Columbia.
- South Dakota: William Blair Roberts (MB), 300 W. 18 St., Sioux Falls; Conrad H. Gesner (CO), 581 Portland Ave., St. Paul, Minn.
- Spokane: Edward Makin Cross, 2303 First Ave., Spokane, Wash.
- Springfield: John Chanler White, 821 S. Second St., Springfield, Ill.
- Tennessee: James Matthew Maxon,* 692 Poplar Ave., Memphis; Edmund P. Dandridge (CO), 2307 Elliston Pl., Nashville.
- Texas: Clinton Simon Quin, 1117 Texas Ave., Houston.
(North): Eugene Cecil Seaman (MB), 1516 Tyler St., Amarillo.
(West): Everett H. Jones, 108 W. French Pl., San Antonio.
- Utah: Arthur W. Moulton (MB), 444 E. First South St., Salt Lake City.
- Vermont: Vedder Van Dyck, Bishop's House, Burlington.
- Virginia: Fred Deane Goodwin, 110 W. Franklin St., Richmond. W. Roy Mason (S), Charlottesville.
(Southern): William Ambrose Brown, 618 Stockley Gardens, Norfolk.
(Southwestern): Henry Disbrow Phillips, 18 Elm Ave., S.W., Roanoke.
- Washington, D.C.: Angus Dun, Cathedral Close, Mt. St. Alban, Washington, D.C.
- West Virginia: Robt. E. L. Strider, 28 Maple Ave., Woodlawn, Wheeling.
- Wyoming: Winfred Hamlin Ziegler (MB), Box 17, Laramie.
- Liberia: Bravid Washington Harris, 281 Fourth Ave., New York 10, N. Y.

*To resign Dec. 31, 1946.

Methodist Bishops

Source: Yearbook of American Churches.

In Service in United States

- James C. Baker, 125 East Sunset Blvd., Los Angeles, Calif.
- Bruce R. Baxter, 408 Artisans Bldg., Portland 5, Ore.
- Charles W. Brashares, 302 Old Colony Bldg., Des Moines, Iowa.

- Robert N. Brooks, 631 Baronne St., New Orleans 13, La.
- Fred Pierce Corson, 1701 Arch St., Philadelphia 3, Pa.
- Ralph S. Cushman, 1987 Summit Ave., St. Paul, Minn.
- U. V. W. Darlington, Huntington, W. Va.

Charles W. Flint, 100 Maryland Ave. N.E., Washington 2, D.C.
 Schuyler E. Garth, First National Bank Bldg., Madison, Wis.
 Wilbur E. Hammaker, 317 Trinity Bldg., Denver, Colo.
 Costen J. Harrell, 516 N. 22d St., Birmingham, Ala.
 Lewis O. Hartman, 581 Boylston St., Boston 16, Mass.
 Ivan Lee Holt, 506 Olive St., St. Louis, Mo.
 Edward W. Kelly, 4160 Enright St., St. Louis 8, Mo.
 Paul B. Kern, 810 Broadway, Nashville 2, Tenn.
 Lorenzo H. King, 250 Auburn Ave., N.E., Atlanta, Ga.
 W. Earl Ledden, 317 East Jefferson St., Syracuse 2, N. Y.
 Edwin F. Lee, 1137 Woodward Bldg., Washington 5, D.C. (Missionary Bishop)
 Titus Lowe, 305 Underwriters Bldg., Indianapolis, Ind.
 J. Ralph Magee, 77 Washington St., Chicago 2, Ill.
 Paul E. Martin, 723 Center St., Little Rock, Ark.
 William C. Martin, 810 National Bank of Topeka Bldg., Topeka, Kans.
 Arthur J. Moore, 63 Auburn Ave., N.E., Atlanta, Ga.
 G. Bromley Oxnam, 150 Fifth Ave., New York 11, N. Y.
 William Walter Peele, Hotel Jefferson, Richmond 16, Va.
 Clare Purcell, 2020 Roswell Ave., Charlotte 4, N. C.
 Charles C. Selecman, Southern Methodist University, Dallas, Tex.
 Alexander P. Shaw, 1206 Etting St., Baltimore 17, Md.
 A. Frank Smith, First Methodist Church, Houston, Tex.
 H. Lester Smith, 44 East Broad St., Columbus 15, Ohio.

W. Angle Smith, 224 N.W. 19th St., Oklahoma City, Okla.
 James H. Straughn, Methodist Center, Smithfield at Seventh, Pittsburgh, Pa.
 Raymond J. Wade, 1205 Kales Bldg., 76 W. Adams Ave., Detroit 26, Mich.
 William T. Watkins, 1115 Fourth Ave., Louisville, Ky.

In Service Abroad

Newell S. Booth, B.P. 622, Elisabethville, Congo Belge, Africa.
 Paul N. Garber, 69 Badenstrasse, Zurich, Switzerland. (American address: 2117 Myrtle Dr., Durham, North Carolina.)
 Willis J. King, Monrovia, Liberia, West Africa. (American address: 150 Fifth Ave., New York 11, N. Y.)

Central Conference Bishops

Enrique C. Balloch, Casilla 67, Santiago, Chile, South America.
 W. Y. Chen, Methodist Mission, Chungking, Sze., China (150 Fifth Ave., New York 11, N. Y.)
 Juan E. Gattinoni, Rivadavia 4044, Buenos Aires, Argentina, South America.
 Z. T. Kaung, Peking, China (Mall address: c/o Methodist Mission, Chungking, Sze., China.)
 Carleton Lacy, Foochow, Fukien, China.
 F. H. Otto Melle, 30 Paulinen, Berlin-Lichterfelde, W. Germany.
 Shot. K. Mondol, Methodist Church, Hyderabad, India.
 J. Waskom Pickett, Byculla, Bombay, India (150 Fifth Ave., New York 11, N. Y.)
 Clement D. Rocky, 37 Cantonment Road, Lucknow, India.
 John A. Subhan, Robinson Memorial Church, Byculla, Bombay, India.
 Ralph A. Ward, 169 Ming Yuen Rd., Shanghai, China (150 Fifth Ave., New York 11, N. Y.)
 Arthur F. Wesley, Buenos Aires, Argentina.

Christian Holidays, 1947 to 1956

Source: Yearbook of American Churches.

The following table indicates when Easter and other important festival days occur during the next ten years. It also indicates the number of Sundays during Epiphany and after Pentecost for each year of the period. Easter may come as early as March 22 or as late as April 25, thus bringing a wide variation in the number of Sundays included in certain of the Christian seasons.

Year	Sundays in Epiphany	Ash Wednesday	Easter	Whitsunday	Sundays after Pentecost	First Sunday in Advent
1947.....	6	Feb. 19	Apr. 6	May 25	26	Nov. 30
1948.....	5	Feb. 11	Mar. 28	May 16	27	Nov. 28
1949.....	8	Mar. 2	Apr. 17	June 5	24	Nov. 27
1950.....	7	Feb. 22	Apr. 9	May 28	26	Dec. 3
1951.....	5	Feb. 7	Mar. 25	May 13	28	Dec. 2
1952.....	7	Feb. 26	Apr. 13	June 1	25	Nov. 30
1953.....	6	Feb. 18	Apr. 5	May 24	26	Nov. 29
1954.....	8	Mar. 3	Apr. 18	June 6	24	Nov. 28
1955.....	7	Feb. 23	Apr. 10	May 29	25	Nov. 27
1956.....	6	Feb. 14	Apr. 1	May 20	27	Dec. 2

Roman Catholic Pontiffs

Source: National Catholic Almanac.

Authorities differ concerning the correct list of the popes. The following is the official list printed in the *Annuario Pontificio* and taken from a series of portraits in the Basilica of St. Paul near Rome. One hundred and three popes have been Romans; one hundred and seven were natives of other parts of Italy; thirteen were French, eleven Greek, seven German, five Asiatic, three African, three Spanish, and two Dalmatian. Palestine, Thrace, Cilicia, Epirus, Galicia, Holland, Portugal, and England have each furnished one occupant of the papal chair.

Name	Birthplace	Accession	Death	Name	Birthplace	Accession	Death
St. Peter	Galilee	33	67	61. Vigilius	Rome	538	555
St. Linus	Volterra	67	78	62. Pelagius I	Rome	555	560
St. Cletus	Rome	78	90	63. John III	Rome	560	573
St. Clement I	Rome	90	100	64. Benedict I	Rome	574	578
St. Anacletus	Athens	100	112	65. Pelagius II	Rome	578	590
St. Evaristus	Bethlehem	112	121	66. St. Gregory I	Rome	590	604
St. Alexander I	Rome	121	132	(the Great)			
St. Sixtus I	Rome	132	142	67. Sabinianus	Bieda	604	606
St. Telesphorus	Greece	142	154	68. Boniface III	Rome	607	607
St. Hyginus	Greece	154	158	69. St. Boniface IV	Valeria	608	615
St. Pius I	Aquileia	158	167	70. St. Adeodatus I	Rome	615	619
St. Anicetus	Emesa	167	175	(Deusededit)			
St. Soter	Campania	175	182	71. Boniface V	Naples	619	625
St. Eleutherius	Epirus	182	193	72. Honorius I	Campania	625	638
St. Victor I	Africa	193	203	73. Ceverinus	Rome	640	640
St. Zephyrinus	Rome	203	221	74. John IV	Dalmatia	640	642
St. Calixtus	Rome	221	227	75. Theodore I	Greece	642	649
St. Urban I	Rome	227	233	76. St. Martin I	Todi	649	655
St. Pontian	Rome	233	238	77. St. Eugenius I	Rome	655	657
St. Anterus	Greece	238	239	78. St. Vitalian	Segni	657	672
St. Fabian	Rome	239	253	79. Adeodatus II	Rome	672	676
St. Cornelius	Rome	253	255	80. Domnus I	Rome	676	678
St. Lucius I	Rome	255	257	81. St. Agatho	Palermo	678	682
St. Stephen I	Rome	257	260	82. St. Leo II	Sicily	682	683
St. Sixtus II	Greece	260	261	83. St. Benedict II	Rome	684	685
St. Dionysius	Greece	261	272	84. John V	Antioch	685	686
St. Felix I	Rome	272	275	85. Conon	Thrace	686	687
St. Eutychian	Luni	275	283	86. St. Sergius I	Palermo	687	701
St. Caius	Dalmatia	283	296	87. John VI	Greece	701	705
St. Marcellinus	Rome	296	304	88. John VII	Rossano	705	707
St. Marcellus I	Rome	304	309	89. Sisinnius	Syria	708	708
St. Eusebius	Greece	309	311	90. Constantine	Syria	708	715
St. Melchisedes	Africa	311	313	91. St. Gregory II	Rome	715	731
St. Sylvester I	Rome	314	337	92. St. Gregory III	Syria	731	741
St. Marcus	Rome	337	340	93. St. Zachary	Greece	741	752
St. Julius I	Rome	341	352	94. Stephen II	Rome	752	752
St. Liberius	Rome	352	366	95. St. Stephen I	Rome	752	757
St. Felix II	Rome	363	365	96. St. Paul I	Rome	757	767
St. Damasus I	Spain	367	384	97. Stephen IV	Syracuse	768	771
St. Siricius	Rome	384	398	98. Adrian I	Rome	771	795
St. Anastasius I	Rome	399	402	99. St. Leo III	Rome	795	816
St. Innocent I	Alvano	402	417	100. St. Stephen V	Rome	816	817
St. Zozimus	Greece	417	418	101. St. Paschal I	Rome	817	824
St. Boniface I	Rome	418	423	102. Eugenius II	Rome	824	827
St. Celestine I	Rome	423	432	103. Valentine	Rome	827	827
St. Sixtus III	Rome	432	440	104. Gregory IV	Rome	827	844
St. Leo I (the Great)	Tuscany	440	461	105. Sergius II	Rome	844	847
St. Hilary	Cagliari	461	468	106. St. Leo IV	Rome	847	855
St. Simplicius	Tivoli	468	483	107. Benedict III	Rome	855	858
St. Felix III	Rome	483	492	108. St. Nicholas I	Rome	858	867
St. Gelasius I	Africa	492	496	(the Great)			
St. Anastasius II	Rome	496	498	109. Adrian II	Rome	867	872
St. Symmachus	Sardinia	498	514	110. John VIII	Rome	872	882
St. Hormisdas	Frosinone	514	523	111. Marinus I	Galicia	882	884
St. John I	Tuscany	523	526	(Martin II)			
St. Felix IV	Sannio	526	530	112. St. Adrian III	Rome	884	885
Boniface II	Rome	530	532	113. Stephen VI	Rome	885	891
John II	Rome	532	535	114. Formosus	Ostia	891	896
St. Agapitus	Rome	535	536	115. Stephen VII	Rome	896	897
St. Silverius	Campania	536	538	116. Romanus	Gaul	897	898

Name	Birthplace	Acces.	Death	Name	Birthplace	Acces.	Death
117. Theodore II	Rome	898	898	186. Adrian V	Genoa	1276	1276
118. John IX	Tivoli	898	900	187. John XIX, XX, or XXI	Lisbon	1276	1277
119. Benedict IV	Rome	900	903	188. Nicholas III	Rome	1277	1280
120. Leo V	Ardea	903	903	189. Martin IV (or II)	Brie	1281	1285
121. Christophorus	Rome	903	904	190. Honorius IV	Rome	1285	1287
122. Sergius III	Rome	904	911	191. Nicholas IV	Ascoli	1288	1292
123. Anastasius III	Rome	911	913	192. St. Celestine V (abd. 1294)	Isernia	1294	1296
124. Landus	Sabino	913	914	193. Boniface VIII	Anagni	1294	1303
125. John X	Ravenna	915	928	194. Bl. Benedict X or XI	Treviso	1303	1304
126. Leo VI	Rome	928	929	195. Clement V (to Avignon)	Guascogna	1305	1314
127. Stephen VIII	Rome	929	931	196. John XX, XXI, or XXII	Cahors	1316	1334
128. John XI	Rome	931	936	197. Benedict XI or XII	Tolosa	1334	1342
129. Leo VII	Rome	936	939	198. Clement VI	Limoges	1342	1352
130. Stephen IX	Germany	939	942	199. Innocent VI	Limoges	1352	1362
131. Marinus II (Martin III)	Rome	942	946	200. Bl. Urban V	Mende	1362	1370
132. Agapitus II	Rome	946	956	201. Gregory XI (ret'd. to Rome)	Limoges	1370	1378
133. John XII	Rome	956	964	202. Urban VI	Naples	1378	1389
134. Benedict V	Rome	964	965	203. Boniface IX	Naples	1389	1404
135. John XIII	Rome	965	972	204. Innocent VII	Sulmona	1404	1406
136. Benedict VI	Rome	972	973	205. Gregory XII (res. 1409)	Venice	1406	1417
137. Dominus II	Rome	973	973	206. Alexander V	Island of Candia	1409	1410
138. Benedict VII	Rome	975	984	207. John XXII, XXIII, or XXIV (res. 1415)	Naples	1410	1419
139. John XIV	Pavia	984	985	208. Martin V (or III)	Rome	1417	1431
140. John XV	Rome	985	996	209. Eugene IV	Venice	1431	1447
141. Gregory V	Saxony	996	999	210. Nicholas V	Sarzana	1447	1455
142. Sylvester II	France	999	1003	211. Callistus III	Valencia	1455	1458
143. John XVI or XVII	Rome	1003	1003	212. Pius II	Siena	1458	1464
144. John XVII or XVIII	Rome	1003	1009	213. Paul II	Venice	1464	1471
145. Sergius IV	Rome	1009	1012	214. Sixtus IV	Savona	1471	1484
146. Benedict VIII	Rome	1012	1024	215. Innocent VIII	Genoa	1484	1492
147. John XVIII, XIX, or XX	Rome	1024	1033	216. Alexander VI	Valencia	1492	1503
148. Benedict IX (res. 1044)	Rome	1033	1044	217. Pius III	Siena	1503	1503
149. Gregory VI (abd. 1046)	Rome	1044	1046	218. Julius II	Savona	1503	1513
150. Clement II	Saxony	1046	1047	219. Leo X	Florence	1513	1521
151. Damasus II	Germany	1048	1048	220. Adrian VI	Utrecht	1522	1523
152. St. Leo IX	Germany	1049	1054	221. Clement VII	Florence	1523	1534
153. Victor II	Bavaria	1055	1057	222. Paul III	Rome	1534	1549
154. Stephen X	Germany	1057	1058	223. Julius III	Monte San Savino	1550	1555
155. Nicolas II	Burgundy	1059	1061	224. Marcellus II	Montepulciano	1555	1555
156. Alexander II	Milan	1061	1073	225. Paul IV	Naples	1555	1559
157. St. Gregory VII	Sovana	1073	1085	226. Pius IV	Milan	1559	1565
158. Bl. Victor III	Benevento	1087	1087	227. St. Pius V	Bosco	1566	1572
159. Bl. Urban II	Reims	1088	1099	228. Gregory XIII	Bologna	1572	1585
160. Paschal II	Bleda	1099	1118	229. Sixtus V	Grottammare	1585	1590
161. Gelasius II	Gaeta	1118	1119	230. Urban VII	Rome	1590	1590
162. Callistus II	Burgundy	1119	1124	231. Gregory XIV	Cremona	1590	1591
163. Honorius II	Bologna	1124	1130	232. Innocent IX	Bologna	1591	1591
164. Innocent II	Rome	1130	1143	233. Clement VIII	Florence	1592	1605
165. Celestine II	Tuscany	1143	1144	234. Leo XI	Florence	1605	1605
166. Lucius II	Bologna	1144	1145	235. Paul V	Rome	1605	1621
167. Bl. Eugene III	Pisa	1145	1153	236. Gregory XV	Bologna	1621	1623
168. Anastasius IV	Rome	1153	1154	237. Urban VIII	Florence	1623	1644
169. Adrian IV	England	1154	1159	238. Innocent X	Rome	1644	1655
170. Alexander III	Siena	1159	1181	239. Alexander VII	Siena	1655	1667
171. Lucius III	Lucca	1181	1185	240. Clement IX	Pistoia	1667	1669
172. Urban III	Milan	1185	1187	241. Clement X	Rome	1670	1676
173. Gregory VIII	Benevento	1187	1187	242. Innocent XI	Como	1676	1689
174. Clement III	Rome	1187	1191	243. Alexander VIII	Venice	1689	1691
175. Celestine III	Rome	1191	1198	244. Innocent XII	Naples	1691	1700
176. Innocent III	Anagni	1198	1216	245. Clement XI	Urbino	1700	1721
177. Honorius III	Rome	1216	1227	246. Innocent XIII	Rome	1721	1724
178. Gregory IX	Anagni	1227	1241	247. Benedict XIII	Naples	1724	1730
179. Celestine IV	Milan	1241	1241	248. Clement XII	Florence	1730	1740
180. Innocent IV	Genoa	1243	1254				
181. Alexander IV	Anagni	1254	1261				
182. Urban IV	Troyes	1261	1264				
183. Clement I	Saint-Gilles	1265	1268				
184. Bl. Gregory X	Piacenza	1271	1276				
186. Bl. Innocent V	Savoy	1276	1276				

Roman Catholic Pontiffs—(cont.)

	Name	Birthplace	Acces.	Death		Name	Birthplace	Acces.	Death
49.	Benedict XIV	Bologna	1740	1758	256.	Gregory XVI	Belluno	1831	1846
50.	Clement XIII	Venice	1758	1769	257.	Pius IX	Senigallia	1846	1878
51.	Clement XIV	Sant' Arcangelo	1769	1774	258.	Leo XIII	Carpineto	1878	1903
52.	Pius VI	Cesena	1775	1799	259.	Pius X	Riese	1903	1914
53.	Pius VII	Cesena	1800	1823	260.	Benedict XV	Genoa	1914	1922
54.	Leo XII	Spoleto	1823	1829	261.	Pius XI	Dasio	1922	1939
55.	Pius VIII	Cingoli	1829	1830	262.	Pius XII	Rome	1939	

The College of Cardinals

Source: The National Catholic Almanac.

Cardinal-Bishops

Year of creation	Name	Office or dignity	Nationality
1911	Gennaro Granito Pignatelli di Belmonte	Bishop of Ostia and Albano; Dean of the College of Cardinals; Prefect of the Congregation of Ceremonies	Italian
1925	Enrico Gasparri	Bishop of Velletri; Prefect of the Apostolic Signature	Italian
1930	Francesco Marchetti-Selvaggiani	Bishop of Frascati; Vicar General of His Holiness; Archpriest of the Patriarchal Basilica of the Lateran; Secretary of the Congregation of the Holy Office	Italian
1933	Carlo Salotti	Bishop of Palestrina; Prefect of the Congregation of Rites	Italian
1935	Enrico Sibilla	Bishop of Sabina and Poggio Mirteto	Italian

Cardinal-Priests

1916	Alessio Ascalesi	Archbishop of Naples	Italian
1921	Michael von Faulhaber	Archbishop of Munich and Freising	German
1921	Dennis J. Dougherty	Archbishop of Philadelphia	American
1923	Giovanni B. Nasalli-Rocca di Cornigliano	Archbishop of Bologna	Italian
1925	Alessandro Verde	Archpriest of Liberian Patriarchal Basilica of St. Mary Major	Italian
1927	Joseph Ernest Van Roey	Archbishop of Malines	Belgian
1927	Auguste Hlond, S. S.	Archbishop of Gneisen and Posen	Polish
1927	Pedro Segura y Saenz	Archbishop of Seville	Spanish
1929	Idefonso Schuster, O. S. B.	Archbishop of Milan	Italian
1929	Manuel Goncalves Cerejeira	Patriarch of Lisbon	Portuguese
1929	Luigi Lavitrano	Archbishop of Palermo	Italian
1930	Raffaello Carlo Rossi, O. C. D.	Secretary of the Consistorial Congregation	Italian
1930	Achilles Lienart	Bishop of Lille	French
1933	Pietro Fumasoni-Biondi	Prefect of the Congregation for the Propagation of the Faith; Camerlengo of the College of Cardinals	Italian
1933	Frederico Tedeschini	Archpriest of Vatican Basilica; Prefect of Congregation of Basilica of St. Peter; Apostolic Datary	Italian
1933	Maurilio Fossati	Archbishop of Turin	Italian
1933	Rodrigue Villeneuve, O. M. I.	Archbishop of Quebec	Canadian
1933	Elias dalla Costa	Archbishop of Florence	Italian
1933	Theodore Innitzer	Archbishop of Vienna	Austrian
1935	Ignatius Tappouni	Syrian Patriarch of Antioch	Iraqi
1935	Francesco Marmaggi	Prefect of the Congregation of the Council	Italian

The College of Cardinals—(cont.)

Year of creation	Name	Office or dignity	Nationality
1935	Emmanuel Suhard	Archbishop of Paris	French
1935	Jaime Luis Copello	Archbishop of Buenos Aires	Argentinian
1935	Pietro Boetto, S. J.	Archbishop of Genoa	Italian
1936	Eugene Tisserant	Secretary of the Congregation of the Oriental Church	French
1937	Adeodato Giovanni Piazza, O. C. D.	Patriarch of Venice	Italian
1937	Giuseppe Pizzardo	Prefect of the Congregation of Seminaries and Universities; President of Catholic Action	Italian
1937	Pierre Marie Gerlier	Archbishop of Lyons	French
1946	Gregory Peter XV Agagianian	Patriarch of Cilicia of the Armenians	Levantine
1946	Benedetto Aloisi Masella	Titular Archbishop of Caesarea in Mauretania, Apostolic Nuncio to Brazil	Italian
1946	Clemente Micara	Titular Archbishop of Apamea in Syria, Apostolic Nuncio to Belgium.	Italian
1946	Adam Stephen Sapieha	Archbishop of Cracow	Polish
1946	Edward Mooney	Archbishop of Detroit	American
1946	Norman Gilroy	Archbishop of Sydney	Australian
1946	Francis J. Spellman	Archbishop of New York	American
1946	Jose Maria Caro Rodriguez	Archbishop of Santiago	Chilean
1946	Teodosio Clemente de Gouveia	Archbishop of Lourenco Marques	Portuguese
1946	Jaime de Barros Camara	Archbishop of Rio de Janeiro	Brazilian
1946	Enrique Pla y Deniel	Archbishop of Toledo and Primate of Spain	Spanish
1946	Manuel Arteaga y Belamcourt	Archbishop of Havana	Cuban
1946	Joseph Frings	Archbishop of Cologne	German
1946	Juan Gualberto Guevara	Archbishop of Lima	Peruvian
1946	Bernard Griffin	Archbishop of Westminster	English
1946	Manuel Arce y Ochotorena	Archbishop of Tarragona	Spanish
1946	Joseph Mindszenty	Archbishop of Esztergom	Hungarian
1946	Ernesto Ruffini	Archbishop of Palermo	Sicilian
1946	Jules Saliege	Archbishop of Toulouse	French
1946	James Charles MacGuigan	Archbishop of Toronto	Canadian
1946	Samuel Alphonsus Stritch	Archbishop of Chicago	American
1946	Emile Roques	Archbishop of Rennes	French
1946	John de Jong	Archbishop of Utrecht	Dutch
1946	Carlos Carmelo de Vasconcelos Mota	Archbishop of Sao Paolo	Brazilian
1946	Pierre Petit De Julleville	Archbishop of Rouen	French
1946	Conrad von Preysing	Bishop of Berlin	German
1946	Antonio Caggiano	Bishop of Rosario	Argentinian
1946	Thomas Tien, S. V. D.	Titular Bishop of Ruspe, Vicar Apostolic of Tsingtao	Chinese

Cardinal-Deacons

1935	Nicola Canali	Grand Penitentiary; President of the commission charged with administration of The Vatican City	Italian
1935	Domenico Jorio	Prefect of the Congregation of the Sacraments	Italian
1935	Massimo Massimi	President of the Commission on the Authentic Interpretation of the Code of Canon Law	Italian
1936	Giovanni Mercati	Librarian and Archivist of the Holy Roman Church	Italian
1946	Giuseppe Bruno	Secretary of the Sacred Congregation of the Council	Italian

Archdioceses of the United States

Source: The National Catholic Almanac.

See	Formed	Archbishop	Consecrated
Baltimore, Md.	1789	Michael J. Curley	1914
Boston, Mass.	1808	Richard J. Cushing	1939
Chicago, Ill.	1843	Samuel Cardinal Stritch	1921
Cincinnati, Ohio	1821	John T. McNicholas, O.P.	1918
Denver, Colo.	1887	Urban J. Vehr	1931
Detroit, Mich.	1833	Edward Cardinal Mooney	1926
Dubuque, Iowa	1837	Francis J. L. Beckman	1924
Indianapolis, Ind.	1834	Joseph E. Ritter	1933
Los Angeles, Calif.	1840	John J. Cantwell	1917
Louisville, Ky.	1808	John A. Floerssh	1923
Milwaukee, Wis.	1843	Moses E. Kiley	1934
Newark, N. J.	1853	Thomas J. Walsh	1918
New Orleans, La.	1793	Joseph F. Rummel	1928
New York, N. Y.	1808	Francis Cardinal Spellman	1932
Omaha, Neb.	1885	James H. Ryan	1933
Philadelphia, Pa.	1808	Dennis Cardinal Dougherty	1903
Portland, Ore.	1846	Edward D. Howard	1924
St. Louis, Mo.	1826	George J. Donnelly, (Actg.)	1940
St. Paul, Minn.	1850	John G. Murray	1920
San Antonio, Tex.	1874	Robert E. Lucey	1934
San Francisco, Calif.	1853	John J. Mitty	1926
		Thomas A. Connolly, (Actg.)	1939
Santa Fe, N. M.	1850	Edwin V. Byrne	1925
Washington, D. C.	1939	Michael J. Curley	1914

Jewish Congregational and Rabbinical Organizations

Source: Yearbook of American Churches.

Jews arrived in the colonies before 1650. The first congregation is recorded in 1656 in New York City, the Shearith Israel (Remnant of Israel).

Churches: 3,728. Inclusive membership: 1,641,184 (1936). Membership 13 years of age or over: 3,341,652 (estimate).

Congregational and Rabbinical Organizations

Union of American Hebrew Congregations: Merchants Bldg., Cincinnati, Ohio; Pres., Adolph Rosenberg; Dir., Maurice N. Eisendrath.

Union of Orthodox Jewish Congregations of America: 305 Broadway, New York, N. Y.; Pres., Samuel Nirenstein; Exec. Dir., Leo S. Hilsenrad.

United Synagogue of America: 3080 Broadway, N. Y. City; Pres., Samuel M. Rothstein; Act. Exec. Dir., Elias L. Solomon.

Central Conference of American Rabbis: 204 Buford Pl., Macon, Ga.; Pres., Solomon B. Freehof; Adm. Sec., Isaac E. Marcuson.

Rabbinical Assembly of America: 3080 Broadway, New York, N. Y.; Pres., Robert Gordis; Corr. Sec., Herman Cohen

Rabbinical Council of America: 331 Madison Ave., New York, N. Y.; Pres., Wm. Drazin; Sec., Samuel Berliant.

Union of Orthodox Rabbis of the United States and Canada: 132 Nassau St., New York, N. Y.; Exec. Dir., L. Seltzer.

Synagogue Council of America: 1133 Broadway, New York, N. Y.; (Represents several of the organizations listed above.) Pres., Herbert S. Goldstein; Asst. to Pres., Aaron Opher; Sec., Benjamin Koenigsburg.

Educational and Social Service Organizations

American Jewish Committee: 386 Fourth Ave., New York, N. Y.; Pres., Joseph M. Proskauer; Exec. Vice Pres., John Slawson; Sec., Victor S. Riesenfeld.

American Jewish Congress: 1834 Broadway, New York, N. Y.; Pres., Stephen S. Wise; Sec. Exec. Com., Samuel Caplan.

American Jewish Historical Society: 3080 Broadway, New York, N. Y.; Pres., Abraham S. W. Rosenbach; Corr. Sec., Alexander Marx.

American Jewish Joint Distribution Committee: 270 Madison Ave., New York, N. Y.; Chmn., Paul Baerwald; Exec. Vice-chmn., Jos. C. Hyman; Sec., Moses A. Leavitt.

Anti-Defamation League of B'nai B'rith: 100 N. LaSalle St., Chicago, Ill.; Chmn., Sigmund Livingston; Nat. Dir., Richard E. Gutstadt.

B'nai B'rith: 1003 K St. N.W., Washington, D. C.; Pres., Henry Monsky; Sec., Maurice Bisgyer.

B'nai B'rith Hillel Foundation Commission: 605 E. Green St., Champaign, Ill.; Nat. Dir., Abram L. Sachar.

Council of Jewish Federations and Welfare Funds: 165 W. 46th St., New York, N. Y.; Pres., Sidney Hollander; Exec. Dir., H. L. Lurie.

Hadassah—Women's Zionist Organization of America: 1819 Broadway, New York, N. Y.; Pres., Mrs. Moses P. Epstein; Sec., Mrs. Robert Szold.

Hebrew Sheltering and Immigrant Aid Society: 425 Lafayette St., New York, N. Y.; Pres., Abraham Herman; Exec. Dir., Isaac L. Asofsky.

Jewish Agricultural Society: 386 Fourth Ave., New York, N. Y.; Pres., Richard S. Goldman; Man. Dir., Gabriel Davidson.

Jewish Labor Committee: 175 E. Broadway, New York, N. Y.; Chmn., Adolph Held; Exec. Sec., Jacob Pat.

Jewish Publication Society of America: 225 S. 15th St., Philadelphia, Pa.; Pres., J. Solis-Cohen, Jr.; Exec. Vice Pres., Maurice Jacobs.

Jewish War Veterans of the United States: 276 Fifth Ave., New York, N. Y.; Natl. Commander, Archie H. Greenberg; Natl. Sec., Esther M. Fredman.

National Council of Jewish Women: 1819 Broadway, New York, N. Y.; Pres., Mrs. Joseph M. Welt; Exec. Dir., Flora R. Rothenberg.

National Federation of Jewish Men's Clubs of the United Synagogue of America:

1316-18 Widener Bldg., Philadelphia, Pa.; Pres., Milton Berger; Corr. Sec., Joseph L. Blum.

National Federation of Temple Brotherhoods: 34 W. Sixth St., Cincinnati, Ohio; Pres., Jesse Cohen; Exec. Sec., Arthur L. Reinhart.

National Federation of Temple Sisterhoods: 34 W. Sixth St., Cincinnati, Ohio, Pres. Mrs. Hugo Hartmann; Exec. Dir., Jan Evans.

National Jewish Welfare Board: 145 E. 32 St., New York, N. Y.; Pres., Frank L. Well; Exec. Dir., Louis Kraft.

National Refugee Service: 139 Center St., New York, N. Y.; Pres., Charles A. Riegelman; Exec. Dir., Joseph E. Beck.

United Palestine Appeal: 41 E. 42nd St., New York, N. Y.; Natl. Chmn., James G. Heller; Exec. Dir., Henry Montor.

Women's Branch of the Union of Orthodox Jewish Congregations: 305 Broadway, New York, N. Y.; Pres., Mrs. Isidor Freedman; Exec. Sec., Mrs. Jacob Awner.

Women's League of the United Synagogue of America: 3080 Broadway, New York, N. Y.; Pres., Mrs. Barnett E. Kopelman; Sec., Mrs. David Kass.

Zionist Organization of America: 1720 16th St. N.W., Washington, D. C.; Pres., Israel Goldstein; Sec., Saul S. Spiro.

Jewish Holidays, 1947 to 1956

All holidays begin at sundown on the evening before the date given.

Year	Purim	Passover	Shabuoth	Rosh Hashanah	Yom Kippur	First two days of Sukkoth	Simchath Torah	Hanukkah
1947...	Mar. 6	Apr. 5 to Apr. 12	May 25-26	Sept. 15-16	Sept. 24	Sept. 29-30	Oct. 7	Dec. 8 to Dec. 15
1948...	Mar. 25	Apr. 24 to May 1	June 13-14	Oct. 4-5	Oct. 13	Oct. 18-19	Oct. 26	Dec. 27 to Jan. 3, 1949
1949...	Mar. 15	Apr. 14 to Apr. 21	June 3-4	Sept. 24-25	Oct. 3	Oct. 8-9	Oct. 16	Dec. 16 to Dec. 23
1950...	Mar. 3	Apr. 2 to Apr. 9	May 22-23	Sept. 12-13	Sept. 21	Sept. 26-27	Oct. 4	Dec. 4 to Dec. 11
1951...	Mar. 22	Apr. 21 to Apr. 28	June 10-11	Oct. 1-2	Oct. 10	Oct. 15-16	Oct. 23	Dec. 24 to Dec. 31
1952...	Mar. 11	Apr. 10 to Apr. 17	May 30-31	Sept. 20-21	Sept. 29	Oct. 4-5	Oct. 12	Dec. 13 to Dec. 20
1953...	Mar. 1	Mar. 31 to Apr. 7	May 20-21	Sept. 10-11	Sept. 19	Sept. 24-25	Oct. 2	Dec. 2 to Dec. 9
1954...	Mar. 19	Apr. 18 to Apr. 25	June 7-8	Sept. 28-29	Oct. 7	Oct. 12-13	Oct. 20	Dec. 20 to Dec. 27
1955...	Mar. 8	Apr. 7 to Apr. 14	May 27-28	Sept. 17-18	Sept. 26	Oct. 1-2	Oct. 9	Dec. 10 to Dec. 17
1956...	Feb. 26	Mar. 27 to Apr. 3	May 16-17	Sept. 6-7	Sept. 15	Sept. 20-21	Sept. 28	Nov. 29 to Dec. 6

Religious and Secular Holidays, 1947

NEW YEAR'S DAY—Wednesday, Jan. 1—A legal holiday in all states and the District of Columbia, New Year's Day has its origin in Roman times, when sacrifices were offered to Janus, the two-faced Roman deity who looked back on the past and forward to the future.

EPIPHANY—Monday, Jan. 6—The Feast of the Epiphany, falling on the twelfth day after Christmas, is observed by all branches of the Christian Church as the anniversary of the baptism of Jesus and His manifestation as the Son of God. This day is also the end of the Advent season and as "Twelfth Night" marks the beginning of the carnival season preceding Lent.

LINCOLN'S BIRTHDAY—Wednesday, Feb. 12—Observed as a legal holiday in Alaska, California, Colorado, Connecticut, Delaware, Illinois, Indiana, Iowa, Kansas, Kentucky, Michigan, Minnesota, Missouri, Montana, Nebraska, Nevada, New Jersey, New Mexico, New York, North Dakota, Ohio, Oregon, Pennsylvania, South Dakota, Tennessee, Utah, Washington, West Virginia and Wyoming. In Massachusetts, the Governor issues a proclamation.

ST. VALENTINE'S DAY—Friday, Feb. 14—A day long held sacred to lovers, St. Valentine's Day may have come from the belief that on February 14 birds begin to mate, although this theory has no more

Religious and Secular Holidays, 1947—(cont.)

similarity than others that have been advanced. It is notable nowadays for the sending of a valentine, generally a card, embossed with a heart, to a loved one.

ASHROVE TUESDAY—Feb. 18—Falls on the Tuesday before Ash Wednesday. The word derives from the Anglo-Saxon, *scrif-tun*, meaning to "shrive" or to be confessed. The day is sometimes familiarly referred to as "Pancake Tuesday" by the English and was suggested by the need of using up the eggs and fat which were prohibited articles of diet during the 40 days of Lent. The day is occasioned by a carnival spirit (Mardi Gras, in France). In the United States, the celebration, marking the end of the carnival season, which began at the end of Advent, reached its highest popularity in New Orleans.

ASH WEDNESDAY—Feb. 19—The Wednesday after Quinquagesima Sunday, upon which begins the fast of the Lenten season. The name, from *dies cinerum*, meaning "day of ashes" is found in the earliest copies of the Gregorian Sacramentary and probably dates from at least the 11th century. The ceremony is marked by the marking of the cross on the foreheads of Roman Catholic worshippers by a priest who dips his thumb in ashes which come from burned remains of the palms used in the Palm Sunday the year before. The Protestant Church also observes the holiday but does not include the use of ashes.

WASHINGTON'S BIRTHDAY—Saturday, Feb. 22—The birthday of George Washington is celebrated as a legal holiday in every State of the Union, the District of Columbia and all territories. The observance began in 1796, three years before Washington's death.

ST. PATRICK'S DAY—Monday, March 17—St. Patrick, patron saint of Ireland, who died 493 A.D. at the venerable age of 66, has been honored in America since the first days of the nation. There are many dinners and meetings and perhaps the most notable part of the observance is the annual St. Patrick's Day parade on Fifth Avenue in New York City.

PALM SUNDAY—March 30—Is observed the Sunday before Easter to commemorate the entry of Jesus into Jerusalem. The ceremonies introducing the benediction of palms and of the procession probably had their origin in Jerusalem. It seems certain that the bearing of the palms during services was the earlier practice, then came the procession, and later the benediction of the palms.

GOOD FRIDAY—April 4—The Friday before Easter Sunday, observed by all branches of the Christian Church in commemoration of the Crucifixion, which is retold during services from the Gospel of

St. John. It is the only day of the year upon which Mass may not be said and only those who are in danger of death may receive Holy Communion. The eating of hot cross buns on this holiday is said to have originated in England.

FIRST DAY OF PASSOVER (Pesach)—Saturday, April 5—The Feast of the Passover, also called the Feast of Unleavened Bread, observed for eight days of which only the first and last days are holy days, commemorates the escape of the first born of the Jews from the Angel of Death, who took from the Egyptians their first born, thus fulfilling the prophecy of Moses. As they fled, the Jews ate unleavened bread and from that time the Jews have allowed no leavening in the home during Passover, the bread being replaced by matzoth.

EASTER SUNDAY—April 6—Observed in all Christian churches, Easter is the principal feast of the ecclesiastical year, and commemorates the resurrection of Jesus. It is celebrated on the first Sunday after the full moon which occurs on or next after March 21 and is therefore celebrated between March 22 and April 25 inclusive. This date was fixed by the Council of Nicaea in 325. The Venerable Bede, the English monk and ecclesiastical historian, claimed the word to have originated from the Anglo-Saxon *Eostre*, old Teutonic goddess of spring.

ASCENSION DAY—Thursday, May 15—Took place in the presence of His apostles 40 days after the resurrection of Jesus. It is traditionally held to have occurred on Mount Olivet in Bethany.

HEBREW PENTECOST (Shabuoth)—Sunday, May 25—The Feast of Harvest, in olden times observed at the end of the wheat harvest. The holiday is sometimes celebrated by decorating houses and synagogues with branches of trees, flowers and various plants. The word originates from the Greek meaning fifty and the day comes fifty days after Passover.

PENTECOST (Whitsunday)—May 25—In this case the day comes fifty days after Easter. It commemorates the descent of the Holy Ghost upon the Apostles fifty days after the resurrection. The sermon by the Apostle Peter which led to the baptism of 3000 who professed belief, originated the ceremonies that have since been followed. The word is believed to have come from "white Sunday" when, among the English, white robes were worn by those baptised on the day.

MEMORIAL DAY—Friday, May 30—Also known as Decoration Day, Memorial Day is a legal holiday in all the northern states and in the territories, and is also observed by the armed forces. In 1868, General John A. Logan, Commander in Chief of the Grand Army of the Republic, issued an

order designating the day as one in which the graves of soldiers would be decorated. The holiday was originally devoted to honoring the memory of those who fell in the War between the States, but is now also dedicated to the memory of the dead of all wars.

FLAG DAY—Sunday, June 14—Flag Day is not a legal holiday but is universally observed throughout the country, particularly in schools. The date originates in the resolution adopted on June 14, 1777.

INDEPENDENCE DAY—Friday, July 4—The day of the adoption of the Declaration of Independence in 1776, celebrated in all states and territories. The observance began in the next year in Philadelphia.

LABOR DAY—Monday, Sept. 1—Observed the first Monday in September in all states and territories, Labor Day was first celebrated in New York in 1882 under the sponsorship of the Central Labor Union, following the suggestion made earlier in the year by Peter J. McGuire, of the Knights of Labor, that the day be set aside in honor of labor.

JEWISH NEW YEAR (Rosh Hashanah)—Monday, Sept. 15—Based on the lunar calendar, Rosh Hashanah is the first of ten penitential days ending in the Day of Atonement.

DAY OF ATONEMENT (Yom Kippur)—Wednesday, Sept. 24—The holiest day of the Jewish year, observed over the centuries since the day was set aside by Moses, according to Biblical belief. All Jews refrain from daily pursuits and since the holiday begins at sundown of the preceding evening, fasting and services in the synagogues begin then and continue to the sundown of the following evening.

FEAST OF THE TABERNACLES (Suk-koth)—Monday, Sept. 29—The name comes from the booths or tabernacles, in which Jewish families lived while they gathered the harvest. One of the ancient customs still preserved in connection with this festival, which lasts eight days, is the hanging of fruits in synagogues to signify the harvest. Orthodox Jews still continue to build small huts in their back yards or on the roofs of houses.

COLUMBUS DAY—Sunday, Oct. 12—A legal holiday in thirty-four states, commemorating the discovery of America by Columbus in 1492. Quite likely the first celebration of Columbus Day was that organized in 1792 by the Society of St. Tammany or Columbian Order, more widely known as Tammany Hall. In 1892, a statue of Columbus was erected at the entrance to Central Park, just above Fifty-ninth Street, New York, and the plaza there was renamed Columbus Circle.

ELECTION DAY (in certain states)—Tuesday, Nov. 4—Since 1845, by Act of Con-

gress, the first Tuesday after the first Monday in November is the date for choosing Presidential electors, who meet December 3.

ARMISTICE DAY—Tuesday, Nov. 11—Commemorates the signing of the Armistice ending World War I in 1918. A Congressional resolution in 1926 directed the President to issue a proclamation annually for observance of the day. It is a legal holiday in many states and in others observance is asked by proclamation of the governors. As part of the day's observance, two minutes of silence are included in the ceremonies honoring the memories of the war dead. The most notable observance is at the Tomb of the Unknown Soldier in Arlington Cemetery, in Washington, D. C.

THANKSGIVING—Thursday, Nov. 27—Observed nationally on the last Thursday in November by proclamation of the President, the first such national proclamation having been issued by President Lincoln in 1863, on the urging of Mrs. Sarah J. Hale, editor of "Godey's Lady's Book" who long had pressed for a national day of thanksgiving. Most Americans believe that the holiday dates back to the day of thanks ordered by Governor Bradford of Plymouth Colony in New England in 1621 but scholars point out that days of thanks stem from ancient times.

FIRST SUNDAY IN ADVENT—Nov. 30—Advent is the season in which the faithful must prepare themselves for the advent of the Savior on Christmas. The four Sundays before Christmas are marked by special church services.

HANUKKAH (Festival of Lights)—Monday, Dec. 8—An eight-day festival, Hanukkah commemorates the purification of the Temple of Jerusalem after it had been desecrated by Antiochus Epiphanes, who set up a pagan altar there in 168 B.C. Eight lamps illuminated the temple and these have been memorialized in the Hanukkah lights, one for each night of the festival, which are lighted in Jewish homes and special prayers said.

CHRISTMAS (Feast of the Nativity)—Thursday, Dec. 25—The most important and the most widely celebrated holiday of the Christian year, it is observed as the anniversary of the birth of Jesus. Christmas customs are centuries old. The mistletoe, for example, comes from the Druids, who, in hanging the mistletoe, hoped for peace and good fortune. Use of such plants as holly comes from the ancient belief that such plants blossomed at Christmas. Comparatively recent is the Christmas tree, first set up in Germany in the 17th century, and the use of candles on trees developed from the belief that candles appeared by miracle on the trees at Christmas. The Germans also gave us the legend of Santa Claus, corrupted from St. Nicholas.

FIFTY LEADING DAILY U. S. NEWSPAPERS BY CIRCULATION

Source: ABC figures of March 31, 1946.

(M—morning; E—evening; M & E—morning and evening; S—Sunday)

City	Newspaper	Circulation	
NEW YORK CITY	DAILY NEWS	2,176,903 M	4,448,346 S
CHICAGO	TRIBUNE	1,026,164 M	1,473,491 S
NEW YORK CITY	MIRROR	891,872 M	2,040,587 S
PHILADELPHIA	BULLETIN	715,457 E	
NEW YORK CITY	JOURNAL-AMERICAN	670,824 E	1,126,824 S
PHILADELPHIA	INQUIRER	579,211 M	1,144,881 S
CHICAGO	HERALD-AMERICAN	551,529 E	1,054,733 S
NEW YORK CITY	TIMES	551,699 M	897,056 S
CHICAGO	DAILY NEWS	489,714 E	
CHICAGO	TIMES	479,532 E	535,629 S
DETROIT	NEWS	404,129 E	501,405 S
NEW YORK CITY	WORLD TELEGRAM	396,096 E	
DETROIT	TIMES	395,789 E	585,574 S
LOS ANGELES	HERALD-EXPRESS	391,088 E	
BOSTON	POST	386,442 M	283,647 S
LOS ANGELES	TIMES	384,119 M	751,290 S
DETROIT	FREE PRESS	381,637 M	426,012 S
LOS ANGELES	EXAMINER	370,972 M	829,323 S
BALTIMORE	SUN	366,769 M & E	285,711 S
CHICAGO	SUN	358,568 M	448,319 S
KANSAS CITY	STAR	357,374 E	355,888 S
DES MOINES	REGISTER TRIBUNE	353,590 M & E	450,290 S
KANSAS CITY	TIMES	348,410 M	
BOSTON	RECORD	344,915 M	
NEW YORK CITY	HERALD TRIBUNE	338,667 M	684,681 S
BOSTON	GLOBE	318,386 M & E	400,432 S
NEW YORK CITY	SUN	306,819 E	
MILWAUKEE	JOURNAL	290,360 E	340,374 S
LOS ANGELES	DAILY NEWS	281,682 M	
PHILADELPHIA	RECORD	270,412 M	508,634 S
MINNEAPOLIS	STAR	270,031 E	
ST. LOUIS	GLOBE-DEMOCRAT	266,463 M	338,750 S
ST. LOUIS	POST-DISPATCH	265,707 E	377,573 S
CLEVELAND	PRESS	264,743 E	
NEW YORK CITY	POST	264,504 E	
PITTSBURGH	PRESS	259,130 E	452,866 S
BUFFALO	NEWS	257,456 E	
PITTSBURGH	POST-GAZETTE	255,021 M	
WASHINGTON, D. C.	TIMES-HERALD	249,576 M	264,484 S
BOSTON	TRAVELER	244,543 E	
CLEVELAND	PLAIN DEALER	241,418 M	412,551 S
SAN FRANCISCO	EXAMINER	239,623 M	585,467 S
NEWARK	NEWS	238,941 E	
BALTIMORE	NEWS-POST	223,203 E	
OMAHA	WORLD-HERALD	215,484 M & E	
WASHINGTON, D. C.	STAR	211,046 E	226,094 S
ATLANTA	JOURNAL	209,593 E	267,227 S
PITTSBURGH	SUN-TELEGRAPH	202,782 E	558,942 S
FORT WORTH	STAR-TELEGRAM	199,125 M & E	155,901 S
BOSTON	AMERICAN	196,865 E	

CHAIN NEWSPAPERS IN THE UNITED STATES

PAUL BLOCK NEWSPAPERS: Pittsburgh Post-Gazette; Toledo Blade; Toledo Times.

BOOTH NEWSPAPERS, INC.: Grand Rapids Press; Flint Journal; Kalamazoo Gazette; Saginaw News; Jackson Citizen-Patriot; Muskegon Chronicle; Bay City Times; Ann Arbor News (all in Michigan).

CAPPER NEWSPAPERS: Topeka Capital; Kansas City Kansan (all in Kansas).

JAMES M. COX NEWSPAPERS: Dayton News; Springfield News; Springfield Sun; Miami News; Atlanta Journal.

FRANK E. GANNETT NEWSPAPERS: Rochester Times Union; Rochester Democrat and Chronicle; Hartford Times; Albany Knickerbocker News; Utica Observer-Dispatch; Utica Press; Elmira Star-Gazette; Elmira Advertiser; Elmira Sunday Telegram; Newburgh News; Beacon News; Plainfield Courier-News; Ithaca Journal; Olean Times-Herald; Ogdensburg Journal; Ogdensburg Advance; Malone Telegram; Danville Commercial-News; Saratoga Springs Saratogan; Messina Observer; Binghamton Press.

GUY P. GANNETT NEWSPAPERS: Kennebec Journal; Portland Press Herald; Portland Evening Express; Portlanda Sunday Telegram; Waterville Sentinel.

HEARST NEWSPAPERS: New York Journal-American; New York Mirror; Albany Times-Union; Boston Record; Boston

American; Boston Sunday Advertiser; Baltimore News-Post; Baltimore Sunday American; Pittsburgh Sunday Telegraph; Chicago Herald-American; Milwaukee Sentinel; Detroit Times; San Francisco Examiner; San Francisco Call-Bulletin, Oakland Post-Enquirer; Los Angeles Examiner; Los Angeles Herald Express; San Antonio Light; Seattle Post Intelligencer.

KNIGHT NEWSPAPERS: Akron Beacon-Journal; Miami Herald; Detroit Free Press; Chicago Daily News.

RIDDER BROTHERS NEWSPAPERS: New York Journal of Commerce; New York Staats-Zeitung and Herold; St. Paul Pioneer Press and Dispatch; Duluth Herald; Duluth News-Tribune; Aberdeen American and News; Grand Forks Herald.

SCRIPPS-HOWARD NEWSPAPERS: New York World-Telegram; Cleveland Press; Pittsburgh Press; Cincinnati Post; Columbus Citizen; San Francisco News; Washington (D. C.) News; Indianapolis Times; Knoxville News Sentinel; Memphis Press-Scimitar; Memphis Commercial-Appeal; Birmingham Post; Houston Press; Ft. Worth Press; El Paso Herald-Post; Albuquerque Tribune; Covington Kentucky Post; Denver Rocky Mountain News; Evansville Press.

J. DAVID STERN NEWSPAPERS: Philadelphia Record; Camden Evening Courier; Camden Morning Post.

THIRTY LEADING MAGAZINES OF THE UNITED STATES

Magazine	Net paid average	Magazine	Net paid average
LADIES' HOME JOURNAL	4,110,361	REDBOOK	1,673,975
LIFE	4,090,145	MODERN SCREEN	1,516,246
WOMAN'S HOME COMPANION	3,538,599	AMERICAN LEGION	1,336,614
SATURDAY EVENING POST	3,466,797	TIME	1,327,352
McCALL'S	3,462,963	LIBERTY (U. S. edition)	1,234,145
COLLIER'S	2,812,381	NATIONAL GEOGRAPHIC	
WOMAN'S DAY	2,654,960	MAGAZINE	1,228,988
GOOD HOUSEKEEPING	2,591,588	MODERN ROMANCES	1,129,737
BETTER HOMES AND GARDENS	2,426,424	PHOTOPLAY	1,044,579
AMERICAN MAGAZINE	2,422,245	MOTION PICTURE	917,038
AMERICAN HOME	2,343,390	TRUE ROMANCES	900,692
TRUE STORY	2,224,850	PARENT'S MAGAZINE	799,483
TRUE CONFESSIONS	2,104,890	POPULAR MECHANICS	746,964
COSMOPOLITAN	2,092,032	SEVENTEEN	731,534
LOOK	2,078,609	POPULAR SCIENCE	684,326
		NEWSWEEK	672,589

March 7, 1876

Alexander Graham Bell, a Scotchman, and teacher of phonetics in Boston University, got a patent for the speaking telephone. Where we would be without the telephone I don't know; I don't even know where we are with it.

April 2, 1902

First motion-picture theater opened. It being the Electric Theater, 262 South Main St., Los Angeles, Calif. Admission to the show—I don't know what show—was ten cents. It lasted one hour.

—F. P. A.

Radio Stations and Networks in the United States

Source: Research Dept., National Association of Broadcasters.

Major networks	No. stations Oct. 1, 1946		Latin-American stations
	Owned and operated	Affiliated	
ABC American Broadcasting Corp.	4	215	...
CBS Columbia Broadcasting System	7	157	123
MBS Mutual Broadcasting System	0	329	...
NBC National Broadcasting Company	6	153	162
Stations* (Nov. 1, 1946)	Operating	Permits for construction	Total
Standard Broadcast	1025	402	1427
Television	6	38	44
FM (frequency-modulation)	48	360†	644‡

*Including territories and possessions. †Fifty-two operating under temporary authority. ‡Includes 236 additional grants of authority.

Canada: There are ninety-seven standard broadcast stations, eleven are owned and operated by the Canadian Broadcasting Corporation (CBC); eighty-six are privately owned and in some cases affiliated with CBC.

"Radio Daily" Poll Awards, 1944-1945

1944

Commercial Programs—"Information Please"; Comedians—Bob Hope; Symphonic Programs—N. Y. Philharmonic Symphony; Educational Series—"America's Town Meeting"; Male Vocalists, Popular—Bing Crosby; Daytime Variety Show—"Breakfast Club"—Don McNeill; News Commentators—Lowell Thomas; Dramatic Series—"Lux Radio Theater; Children's Shows—"Let's Pretend"; Sports Commentators—Bill Stern; Symphonic Conductors—Arturo Toscanini; Female Vocalists, Popular—Dinah Shore; Male Vocalists, Classical—John Charles Thomas; Dance Bands, Sweet—Guy Lombardo; Announcers—Don Wilson; Quiz Shows—"Information Please"; Female Vocalists, Classical—Lily Pons; Comedy Teams—Fibber McGee and Molly; Comedienne—Joan Davis; Entertainers—Bob Hope; Popular Singing Units—Fred Astaire; Glee Club; Woman Commentators—Dorothy Thompson; Dramatic Serials—"One Man's Family"; Dance Bands, Swing—Harry James; Stars of Tomorrow, Male—Alan Young; Stars of Tomorrow, Female—Jo Stafford; Songs 1944—"I'll Walk Alone"; Musical Composition of 1944—"Holiday for Strings."

1945

Commercial Programs—Fibber McGee and Molly; Comedians—Bob Hope; Symphonic Programs—N. Y. Philharmonic Symphony; Educational Series—"America's Town Meeting"; Male Vocalists, Popular—Bing Crosby; Daytime Variety Shows—"Breakfast Club"—Don McNeill; News Commentators—Lowell Thomas; Dramatic Series—"Lux Radio Theater; Children's Shows—"Let's Pretend"; Sports Commentators—Bill Stern; Symphonic Conductors—Arturo Toscanini; Female Vocalists, Popular—Dinah Shore; Male Vocalists, Classical—John Charles Thomas; Dance Bands, Sweet—Guy Lombardo; Announcers—Don Wilson; Quiz Shows—"Information Please"; Female Vocalists, Classical—Lily Pons; Comedy Teams—Fibber McGee and Molly; Comedienne—Joan Davis; Entertainers—Bob Hope; Popular Singing Units—Andrews Sisters; Popular Musical Shows—"Hit Parade"; Dramatic Serials—"One Man's Family"; Dance Bands, Swing—Tommy Dorsey; Song of the Year—"Till the End of Time"; Musical Composition of the Year—"Polonaise."

Source: Radio Daily.

Anagram

My first is in silent, but never in loud;
My second's in love, but not ever in proud;
My third is in Robert, but never in Taft;
My fourth is in swindle, but never in graft;
My fifth is in happiness, never in bliss;
My whole will o'er take you before you
solve this.

ANSWER—Sleep.

Useful Hints

For Scalds—See Burns.

To remove butter and coffee stains from white garments, remove garments at meals, and attire yourself in a neatly fitting diving suit.

In shooting crap, never say die; say dice.—F. P. A.

U. S. Postal Regulations

First Class (limit 70 pounds):

Letters and written and sealed matter, 3 cents for each ounce, local and non-local, except that drop letters are subject to 1 cent for each ounce when deposited for local delivery at offices not having letter-carrier service, provided they are not collected or delivered by star-route carriers.

Government postal cards, 1 cent each.

Private mailing or post cards, 1 cent each.

Air Mail (limit 70 pounds):

Five cents for each ounce or fraction thereof on mainland of United States, Hawaii, Canal Zone, Puerto Rico, and other island possessions.

Second Class (no limit of weight):

Newspapers, magazines, and other periodicals containing notice of second-class entry, 1 cent for each 2 ounces or fraction thereof, or the fourth-class rate, whichever is lower.

Third Class (limit 8 ounces):

Circulars and other miscellaneous printed matter, also merchandise, 1½ cents for each 2 ounces.

Books (including catalogs) of 24 pages or more, seeds, cuttings, bulbs, roots, scions and plants, 1 cent for each 2 ounces.

Identical pieces of third-class matter may be mailed under permit in bulk lots of not less than either 20 pounds or 200 pieces, at the rate of 12 cents a pound, or fraction thereof, in case of circulars, miscellaneous printed matter and merchandise, and 8 cents a pound, or fraction thereof, in the case of books or catalogs having 24 pages or more, seeds, plants, etc., with a minimum charge of 1 cent a piece in either case. Apply to postmaster for permit.

For conditions and restrictions governing mail to our armed forces overseas, consult postmaster.

Fourth Class (over 8 ounces):

Limit of size, 100 inches length and girth combined. Limit of weight, 70 pounds.

Merchandise, books, printed matter, and all other mailable matter not in first or second class.

Special rates for books. Books (containing no advertising matter other than incidental announcements of books) all zones:

3 cents a pound plus 1 cent up to and including 16 pounds; 17 to 27 pounds, 3 cents a pound plus 3 cents; 28 to 40 pounds, 3 cents a pound plus 4 cents; 41 to 61 pounds, 3 cents a pound plus 5 cents; 62 to 70 pounds, 3 cents a pound plus 6 cents.

Library books. Books sent by authorized libraries to readers and when returned by such readers, for delivery within the first three zones or the State in which mailed: 4 cents for the first pound and 1 cent for each additional pound up to and including 47 pounds; 52 cents for 48 pounds and 1 cent for each additional pound up to and including 70 pounds.

Special Delivery and Special Handling Fees:

The prepayment of the special-delivery fee on second, third or fourth-class mail entitles it to the most expeditious handling and transportation practicable, and also entitles it to special delivery at the office of address.

Parcels of fourth-class matter endorsed "Special Handling" will be given the most expeditious handling, transportation and delivery practicable (but not special delivery) upon payment in addition to the regular postage of the following charge:

Weight	Special Delivery		Special Handling (Fourth class only)
	First class	Second, third or fourth class	
Up to 2 pounds	13¢	17¢	10¢
Over 2 pounds up to 10 pounds	20¢	25¢	15¢
Over 10 pounds	25¢	35¢	20¢

Registered, Insured and C. O. D. Mail:

The sending of registered or insured mail to Army and Navy personnel overseas is restricted. Consult postmasters for details. C. O. D. mail cannot be sent to Navy personnel on board ships or at overseas shore stations.

Registered Mail:

Fees for indemnity limited to:

\$ 5	\$.20	\$ 500	\$.95
50 . . . . .	.25	600	1.05
75 . . . . .	.35	700	1.15
100 . . . . .	.40	800	1.20
200 . . . . .	.55	900	1.25
300 . . . . .	.65	1,000	1.35
400 . . . . .	.80		

EXCEPTIONS (See Chart on opposite page)

In the first or second zone, where the distance by the shortest regular practicable mail route is 300 miles or more, the rate is the same as for the third zone.

On parcels collected on rural routes, the postage is 2 cents less per parcel than at rates in table when for local delivery and 3 cents less per parcel when for other than local delivery.

Parcels weighing less than 10 pounds, but exceeding 84 inches in girth combined, are subject to 10-pound rate. For special rates on catalogs, and other similar printed advertising matter, consult postmaster.

Weight	Local	Zones						
		1-2 Up to 150 miles	3 150 to 300 miles	4 300 to 600 miles	5 600 to 1,000 miles	6 1,000 to 1,400 miles	7 1,400 to 1,800 miles	8 Over 1,800 miles
1	\$0.08	\$0.09	\$0.10	\$0.11	\$0.12	\$0.13	\$0.15	\$0.16
2	.09	.11	.12	.15	.18	.20	.24	.27
3	.09	.12	.14	.18	.23	.27	.33	.38
4	.10	.13	.16	.22	.28	.34	.42	.49
5	.10	.14	.18	.25	.34	.41	.52	.61
6	.11	.15	.20	.29	.39	.48	.61	.72
7	.11	.16	.22	.32	.44	.56	.70	.83
8	.12	.17	.24	.36	.50	.63	.79	.95
9	.12	.18	.26	.39	.56	.70	.89	1.06
10	.13	.19	.28	.43	.61	.77	.98	1.17
11	.13	.20	.30	.46	.66	.84	1.07	1.29
12	.14	.22	.32	.50	.72	.92	1.16	1.40
13	.14	.23	.34	.54	.77	.99	1.26	1.51
14	.15	.24	.36	.58	.82	1.06	1.35	1.63
15	.15	.25	.38	.61	.89	1.13	1.44	1.74
16	.16	.26	.40	.65	.94	1.21	1.53	1.85
17	.16	.27	.42	.68	.99	1.28	1.63	1.97
18	.17	.28	.44	.72	1.05	1.35	1.72	2.08
19	.17	.29	.46	.75	1.10	1.42	1.81	2.19
20	.18	.30	.48	.79	1.15	1.49	1.91	2.31
21	.18	.31	.50	.82	1.21	1.57	2.00	2.42
22	.19	.33	.53	.87	1.27	1.64	2.09	2.53
23	.19	.34	.55	.90	1.32	1.71	2.18	2.65
24	.20	.35	.57	.94	1.37	1.78	2.28	2.76
25	.20	.36	.59	.97	1.43	1.85	2.37	2.87
26	.21	.37	.61	1.01	1.48	1.93	2.46	2.99
27	.21	.38	.63	1.04	1.53	2.00	2.55	3.10
28	.22	.39	.65	1.08	1.60	2.07	2.65	3.21
29	.22	.40	.67	1.11	1.65	2.14	2.74	3.33
30	.23	.41	.69	1.15	1.70	2.21	2.83	3.44
31	.23	.42	.71	1.18	1.75	2.29	2.93	3.55
32	.24	.44	.73	1.23	1.81	2.36	3.02	3.67
33	.24	.45	.75	1.26	1.86	2.43	3.11	3.78
34	.25	.46	.77	1.30	1.92	2.50	3.20	3.89
35	.25	.47	.79	1.33	1.98	2.58	3.30	4.01

Weight	Local	Zones						
		1-2 Up to 150 miles	3 150 to 300 miles	4 300 to 600 miles	5 600 to 1,000 miles	6 1,000 to 1,400 miles	7 1,400 to 1,800 miles	8 Over 1,800 miles
36	\$0.26	\$0.48	\$0.81	\$1.37	\$2.03	\$2.65	\$3.39	\$4.12
37	.26	.49	.83	1.40	2.08	2.72	3.48	4.23
38	.27	.50	.85	1.44	2.14	2.79	3.57	4.35
39	.27	.52	.88	1.47	2.19	2.86	3.67	4.46
40	.28	.53	.90	1.51	2.25	2.94	3.76	4.57
41	.28	.54	.92	1.55	2.30	3.01	3.85	4.69
42	.29	.56	.94	1.59	2.36	3.08	3.94	4.80
43	.29	.57	.96	1.62	2.41	3.15	4.04	4.91
44	.30	.58	.98	1.66	2.46	3.22	4.13	5.03
45	.30	.59	1.00	1.69	2.52	3.30	4.22	5.14
46	.31	.60	1.02	1.73	2.58	3.37	4.32	5.25
47	.31	.61	1.04	1.76	2.63	3.44	4.41	5.37
48	.32	.62	1.06	1.80	2.69	3.51	4.50	5.48
49	.32	.63	1.08	1.83	2.74	3.58	4.59	5.59
50	.33	.64	1.10	1.87	2.79	3.66	4.69	5.71
51	.33	.65	1.12	1.91	2.84	3.73	4.78	5.82
52	.34	.67	1.14	1.95	2.90	3.80	4.87	5.93
53	.34	.68	1.16	1.98	2.96	3.87	4.96	6.05
54	.35	.69	1.18	2.02	3.01	3.94	5.06	6.16
55	.35	.70	1.21	2.05	3.07	4.02	5.15	6.27
56	.36	.71	1.23	2.09	3.12	4.09	5.24	6.39
57	.36	.72	1.25	2.12	3.17	4.16	5.34	6.50
58	.37	.73	1.27	2.16	3.23	4.23	5.43	6.61
59	.37	.74	1.29	2.19	3.29	4.31	5.52	6.73
60	.38	.75	1.31	2.24	3.34	4.38	5.61	6.84
61	.38	.76	1.33	2.27	3.39	4.45	5.71	6.95
62	.39	.78	1.35	2.31	3.45	4.52	5.80	7.07
63	.39	.79	1.37	2.34	3.50	4.59	5.89	7.18
64	.40	.80	1.39	2.38	3.55	4.67	5.98	7.29
65	.40	.81	1.41	2.41	3.62	4.74	6.08	7.41
66	.41	.82	1.43	2.45	3.67	4.81	6.17	7.52
67	.41	.83	1.45	2.48	3.72	4.88	6.26	7.63
68	.42	.84	1.47	2.52	3.78	4.95	6.36	7.75
69	.42	.85	1.49	2.55	3.83	5.03	6.45	7.86
70	.43	.87	1.51	2.60	3.88	5.10	6.54	7.97

Domestic registered mail is subject to surcharges in addition to regular registry fees as follows: When declared value exceeds maximum indemnity covered by registry fee paid by not more than \$50, 2 cents; over \$50, not over \$100, 3 cents; over \$100, not over \$200, 4 cents; over \$200, not over \$400, 6 cents; over \$400, not over \$600, 7 cents; over \$600, not over \$800, 8 cents; over \$800 but less than \$1,000, 10 cents. If excess of declared value over maximum indemnity covered by registry fee paid is \$1,000 or more, additional fees for each \$1,000 or part of \$1,000 are: For local delivery or delivery in 1st zone, 11 cents; 2d zone, 12 cents; 3d zone, 14 cents; 4th zone, 15 cents; 5th or 6th zone, 16 cents; 7th or 8th zone, 18 cents. In the case of nonnegotiable securities, surcharge is based on the known or estimated cost of duplication.

Registration fee for mail without intrinsic value for which no indemnity is paid, 20 cents.

Insured Mail (third and fourth classes):

Fees for indemnity limited to:

\$5	\$.03	\$ 50	\$.15
2 .....	.10	200 .....	.60

C. O. D. Mail:

Unregistered (third and fourth classes and sealed matter of any class bearing postage at the first-class rate). Fees for collections and indemnity limited to:

\$ 2.50	\$.15	\$100	\$.50
5 .....	.20	150 .....	.55
25 .....	.30	200 .....	.60
50 .....	.40		

Domestic mail of any class sealed against inspection and bearing postage at the first-class rate may be sent as registered collect-on-delivery mail. The maximum amount collectible is \$200; maximum indemnity, \$1,000. For further details, consult postmaster.

A demurrage charge of 5 cents a day is collected on each C. O. D. article which the addressee fails to accept within 20 days after the first attempt to deliver or the first notice of arrival at the office of address is given.

Fee of 5 cents is charged for notifying sender of nondelivery of C. O. D. mail.

Return receipts for registered or insured mail: fee, if requested at time of mailing, 4 cents; after mailing, 7 cents; at time of mailing to show address of delivery, 31 cents.

An additional charge of 20 cents is made when registered, insured or C. O. D. mail is restricted in delivery to addressee only, or to the addressee or order.

Certificates of mailing for ordinary mail of any class and additional certificates for ordinary, registered, insured and C. O. D. mail, 1 cent for each article described thereon.

Europe:

Service to Europe by steamer from New York City: THREE cents (\$.03) per half ounce in addition to regular postage. Articles prepaid the above fee are forwarded to the port of call of the steamer assigned mails for the countries involved. They are dispatched onward from the port of call by the best available opportunity, air mail or otherwise.

Air Mail Postage Rates

Domestic includes Alaska, Canal Zone, Canton Island, Guam, Hawaii, Midway Island, Puerto Rico, U. S. Virgin Islands, Wake Island, Canada and Mexico: FIVE cents (\$.05) per ounce.

Air mail addressed for delivery to APO's or Fleet Post Offices outside the continental United States care of Postmaster—FIVE cents (\$.05) per ounce—limit EIGHT ounces.

By air to U. S. Coast, or border, exchange offices and thence by ordinary means to destination, SEVEN cents (\$.07) per ounce or fraction. This rate includes air service in the United States and surface transportation onward to destination.

Foreign Air Mail Rates per half ounce in cents

(from the United States to destination)

Aden	25
Afghanistan	25
Albania	15
Algeria	15
Anglo-Egyptian Sudan	25
Angola (Portuguese West Africa)	25
Argentina	10
Australia	25
Austria*	15
Azores	15
Bahamas	10
Bahrein	25
Barbados	10
Belgian Congo	25
Belgium	15
Bermuda	10
Bolivia	10
Brazil	10
British Cameroons	25
British Guiana	10
British Honduras	10
British Somaliland	25
Brunei	25
Bulgaria	15
Burma	25
Canada (per ounce)	05
Canary Islands	25
Cape Verde Islands	25
Ceylon	25
Chile	10
China†	25
Colombia	10
Corsica	15
Costa Rica	10
Cuba	08

Açao: Curaçao Island, Aruba,		Mauritius	25
Monaire, Saba, St. Eustatius,		Mexico (per ounce)	05
St. Martins	10	Morocco (British)	15
Arus	25	Morocco (French)	15
Czechoslovakia	15	Morocco (Spanish)	15
Homey	25	Netherlands	15
Mark	15	Netherlands Indies	25
Trinidad Republic	10	New Caledonia	25
ador	10	Newfoundland§	10
pt	15	New Zealand	25
area	25	Nicaragua	10
onia	15	Niger	25
opia	25	Nigeria	25
aland Islands	10	North Borneo	25
de Islands	15	Norway	15
erated Malay States	25	Nyasaland Protectorate	25
land	15	Palestine	25
nce	15	Panama	10
nch Camerouns	25	Paraguay	10
nch Equatorial Africa	25	Peru	10
nch Guiana	10	Philippines*	25
nch Guinea	25	Poland	15
nch Indo-China†	25	Portugal	15
nch Settlements in India	25	Portuguese East Africa (Mozam- bique)	25
nch Somaliland	25	Portuguese Guinea	25
nch Sudan	25	Portuguese India	25
nch Togoland	25	Portuguese West Africa (see Angola and Portuguese Guinea)	
mbia	25	Réunion	25
many†	15	Rhodesia (Northern)	25
raltar	15	Rhodesia (Southern)	25
d Coast Colony	25	Rio de Oro	25
at Britain and Northern Ireland	15	Rumania	15
eece	15	Salvador, El	10
adeloupe	10	Sarawak	25
atemala	10	Saudi Arabia	25
ti	10	Senegal	25
nduras (Republic of)	10	Siam	25
ng Kong	25	Sierra Leone	25
ngary	15	South West Africa	25
land	15	Spain (including Spanish offices in North Africa)	15
ia, British	25	Spanish Guinea	25
n	25	Straits Settlements	25
land	15	Surinam	10
lian Somaliland	25	Sweden	15
ly (continental only)	15	Switzerland	15
ry Coast	25	Syria	25
maica	10	Tanganyika	25
aya and Uganda	25	Trans-Jordan	25
via	15	Trinidad	10
anon (Republic of)	25	Tunisia	15
ward Islands: Anguilla, Antigua,		Turkey	15
Barbuda, Dominica, Montserrat,		Union of South Africa	25
Nevis, Redonda, St. Kitts, British		Union of Soviet Socialist Republics	15
Virgin Islands	10	Uruguay	10
eria	25	Vatican City State	15
ya	15	Venezuela	10
huania	15	Windward Islands: Grenada, Grena- dines, St. Lucia, St. Vincent	10
kembourg	15	Yemen	25
cao	25	Yugoslavia	15
agascar	25	Zanzibar	25
deira Islands	15		
lay States (Nonfederated and Federated)	25		
lta	15		
nchuria†	25		
rtinique	10		
uritania	25		

*Articles limited to 1 pound in weight.

†Articles limited to 2 ounces in weight.

‡Articles limited to 1 ounce in weight.

§Articles limited to 60 pounds in weight.

All other places limited to 4 pounds 6 ounces.

The Record

By Grantland Rice

*When the game is done and the players creep
One by one to the League of Sleep,
Deep in the night they may not know
The way of the fight, the fate of the foe.
The cheer that passed, and applauding hands,
Are stilled at last—but the Record stands.*

*The errors made, and the base hits wrought;
Here the race was run! There the fight was fought!
Yet the game is done when the sun sinks low
And one by one from the field they go;
Their day has passed through the Twilight Gates,
But the Scroll is cast—and the Record waits.*

*So take, my lad, what the Great Game gives,
For all men die—but the Record lives.*

BASEBALL

THE POPULAR TRADITION that baseball was invented by Abner Doubleday at Coopers-town, N. Y., in 1839, has been enshrined in the Hall of Fame and National Museum of Baseball erected in that town, but research has proved that a game called "Base Ball" was played in this country and England before 1839. However, the first team baseball as we know it was played at the Elysian Fields, Hoboken, N. J., on June 19, 1846, between the Knickerbockers and the New York Nine. There was a gradual growth of baseball and an improvement of equipment and playing skill in the next fifty years. Soldiers returning home from the Civil War spread over the country the game they had learned to play in their camps.

Historians have it that the first pitcher to throw a curve was William A. (Candy) Cummings in 1867. The Cincinnati Red Stockings were the first all-professional

team and in 1869 they played 64 games without a loss. The standard ball of the same size and weight, still the rule, was adopted in 1872. The first catcher's mask was worn in 1875. The National League was organized in 1876. The first chest protector was donned in 1885. The three-strike rule was put on the books in 1887 and the four-ball ticket to first base came in 1889. The pitching distance, formerly shorter, was lengthened to 60 feet 6 inches in 1893 and the rules have been only slightly modified since that time.

The American League, under the vigorous leadership of B. B. Johnson, blossomed forth as a major league in 1901. Judge Kenesaw Mountain Landis, by action of the two major leagues, became Commissioner of Baseball in 1921 and, upon his death (1944), Albert B. Chandler, former United States Senator from Kentucky, was elected to that office (1945).

PROFESSIONAL BASEBALL GOVERNMENT

NATIONAL LEAGUE—AMERICAN LEAGUE—NATIONAL ASSOCIATION

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Walter W. Mulbry, Secretary-Treasurer
2601 Carew Tower, Cincinnati, Ohio

NATIONAL LEAGUE

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President-Secretary-Treasurer
Office: 30 Rockefeller Plaza, New York City
Chairman of the Board, John A. Heydler
Service Bureau: Charles M. Segar, Manager

AMERICAN LEAGUE

William Harridge
President-Secretary-Treasurer
President's office: 310 South Michigan Avenue, Chicago, Ill.
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Umpire Adviser

William B. Carpenter, 2700 Vine Street, Cincinnati, Ohio

Baseball Statistics

Source: The Elias Baseball Bureau, New York City.

Record of World Series Games

Figures in parentheses indicate number of victories for each club. Pitchers named are winner and loser, respectively.

1903—BOSTON A. L. (5) vs. PITTSBURGH N. L. (3)

(Not under Brush rules)

1—Pittsburgh (Phillippe).....	7	Boston (Young).....	3	At Boston
2—Boston (Dinneen).....	3	Pittsburgh (Leever).....	0	At Boston
3—Pittsburgh (Phillippe).....	4	Boston (Hughes).....	2	At Boston
6—Pittsburgh (Phillippe).....	5	Boston (Dinneen).....	4	At Pittsburgh
7—Boston (Young).....	11	Pittsburgh (Kennedy).....	2	At Pittsburgh
8—Boston (Dinneen).....	6	Pittsburgh (Leever).....	3	At Pittsburgh
10—Boston (Young).....	7	Pittsburgh (Phillippe).....	3	At Pittsburgh
13—Boston (Dinneen).....	3	Pittsburgh (Phillippe).....	0	At Boston

Managers—J. J. Collins, Boston; F. C. Clarke, Pittsburgh.

1904—NO SERIES

1905—NEW YORK N. L. (4) vs. PHILADELPHIA A. L. (1)

Oct. 9—New York (Mathewson).....	3	Philadelphia (Plank).....	0	At Philadelphia
Oct. 10—Philadelphia (Bender).....	3	New York (McGinnity).....	0	At New York
Oct. 12—New York (Mathewson).....	9	Philadelphia (Coakley).....	0	At Philadelphia
Oct. 13—New York (McGinnity).....	1	Philadelphia (Plank).....	0	At New York
Oct. 14—New York (Mathewson).....	2	Philadelphia (Bender).....	0	At New York

Managers—John J. McGraw, New York; Connie Mack, Philadelphia.

1906—CHICAGO A. L. (4) vs. CHICAGO N. L. (2)

Oct. 9—Chicago A (Altrock).....	2	Chicago N (Brown).....	1	At Chicago Nat. Pk.
Oct. 10—Chicago N (Reulbach).....	7	Chicago A (White).....	1	At Chicago Am. Pk.
Oct. 11—Chicago A (Walsh).....	3	Chicago N (Pfister).....	0	At Chicago Nat. Pk.
Oct. 12—Chicago N (Brown).....	1	Chicago A (Altrock).....	0	At Chicago Am. Pk.
Oct. 13—Chicago A (Walsh).....	8	Chicago N (Pfister).....	6	At Chicago Nat. Pk.
Oct. 14—Chicago A (White).....	8	Chicago N (Brown).....	3	At Chicago Am. Pk.

Managers—Felder Jones, Chicago A. L.; Frank L. Chance, Chicago N. L.

1907—CHICAGO N. L. (4) vs. DETROIT A. L. (0)

Oct. 8—Chicago (tie).....	3	Detroit (tie).....	3	At Chicago (12 inn.)
Oct. 9—Chicago (Pfister).....	3	Detroit (Mullin).....	1	At Chicago
Oct. 10—Chicago (Reulbach).....	5	Detroit (Siever).....	1	At Chicago
Oct. 11—Chicago (Overall).....	6	Detroit (Donovan).....	1	At Detroit
Oct. 12—Chicago (Brown).....	2	Detroit (Mullin).....	0	At Detroit

Managers—Frank L. Chance, Chicago; Hugh Jennings, Detroit.

1908—CHICAGO N. L. (4) vs. DETROIT A. L. (1)

Oct. 10—Chicago (Brown).....	10	Detroit (Summers).....	6	At Detroit
Oct. 11—Chicago (Overall).....	6	Detroit (Donovan).....	1	At Chicago
Oct. 12—Detroit (Mullin).....	8	Chicago (Pfister).....	3	At Chicago
Oct. 13—Chicago (Brown).....	3	Detroit (Summers).....	0	At Detroit
Oct. 14—Chicago (Overall).....	2	Detroit (Donovan).....	0	At Detroit

Managers—Frank L. Chance, Chicago; Hugh Jennings, Detroit.

1909—PITTSBURGH N. L. (4) vs. DETROIT A. L. (3)

Oct. 8—Pittsburgh (Adams).....	4	Detroit (Mullin).....	1	At Pittsburgh
Oct. 9—Detroit (Donovan).....	7	Pittsburgh (Carnitz).....	2	At Pittsburgh
Oct. 11—Pittsburgh (Maddox).....	8	Detroit (Summers).....	6	At Detroit
Oct. 12—Detroit (Mullin).....	5	Pittsburgh (Leifield).....	0	At Detroit
Oct. 13—Pittsburgh (Adams).....	8	Detroit (Summers).....	4	At Pittsburgh
Oct. 14—Detroit (Mullin).....	5	Pittsburgh (Willis).....	4	At Detroit
Oct. 16—Pittsburgh (Adams).....	8	Detroit (Donovan).....	0	At Detroit

Managers—Fred C. Clarke, Pittsburgh; Hugh Jennings, Detroit.

1910—PHILADELPHIA A. L. (4) vs. CHICAGO N. L. (1)

Oct. 17—Philadelphia (Bender).....	4	Chicago (Overall).....	1	At Philadelphia
Oct. 18—Philadelphia (Coombs).....	9	Chicago (Brown).....	3	At Philadelphia
Oct. 20—Philadelphia (Coombs).....	12	Chicago (Mcintire).....	5	At Chicago
Oct. 22—Chicago (Brown).....	4	Philadelphia (Bender).....	3	At Chicago (10 inn.)
Oct. 23—Philadelphia (Coombs).....	7	Chicago (Brown).....	2	At Chicago

Managers—Connie Mack, Philadelphia; Frank L. Chance, Chicago.

1911—PHILADELPHIA A. L. (4) vs. NEW YORK N. L. (2)

Oct. 14—New York (Mathewson).....	2	Philadelphia (Bender).....	1	At New York
Oct. 16—Philadelphia (Plank).....	3	New York (Marquard).....	1	At Philadelphia
Oct. 17—Philadelphia (Coombs).....	3	New York (Mathewson).....	2	At New York (11 inn.)
Oct. 24—Philadelphia (Bender).....	4	New York (Mathewson).....	2	At Philadelphia
Oct. 25—New York (Crandall).....	4	Philadelphia (Plank).....	3	At New York (10 inn.)
Oct. 26—Philadelphia (Bender).....	13	New York (Ames).....	2	At Philadelphia

Managers—Connie Mack, Philadelphia; John J. McGraw, New York.

1912—BOSTON A. L. (4) vs. NEW YORK N. L. (3)

8—Boston (Wood).....	4	New York (Tesreau).....	3	At New York
9—Boston (tie).....	6	New York (tie).....	6	At Boston (11 inn.)
10—New York (Marquard).....	2	Boston (O'Brien).....	1	At Boston
11—Boston (Wood).....	3	New York (Tesreau).....	1	At New York
12—Boston (Bedient).....	2	New York (Mathewson).....	1	At Boston
14—New York (Marquard).....	5	Boston (O'Brien).....	2	At New York
15—New York (Tesreau).....	11	Boston (Wood).....	4	At Boston
16—Boston (Wood).....	3	New York (Mathewson).....	2	At Boston (10 inn.)

Managers—J. Garland Stahl, Boston; John J. McGraw, New York.

1913—PHILADELPHIA A. L. (4) vs. NEW YORK N. L. (1)

7—Philadelphia (Bender).....	6	New York (Marquard).....	4	At New York
8—New York (Mathewson).....	3	Philadelphia (Plank).....	0	At Philadelphia (10 inn.)
9—Philadelphia (Bush).....	8	New York (Tesreau).....	2	At New York
10—Philadelphia (Bender).....	6	New York (Demaree).....	5	At Philadelphia
11—Philadelphia (Plank).....	3	New York (Mathewson).....	1	At New York

Managers—Connie Mack, Philadelphia; John J. McGraw, New York.

1914—BOSTON N. L. (4) vs. PHILADELPHIA A. L. (0)

9—Boston (Rudolph).....	7	Philadelphia (Bender).....	1	At Philadelphia
10—Boston (James).....	1	Philadelphia (Plank).....	0	At Philadelphia
12—Boston (James).....	5	Philadelphia (Bush).....	4	At Boston (12 inn.)
13—Boston (Rudolph).....	3	Philadelphia (Shawkey).....	1	At Boston

Managers—George T. Stallings, Boston; Connie Mack, Philadelphia.

1915—BOSTON A. L. (4) vs. PHILADELPHIA N. L. (1)

8—Philadelphia (Alexander).....	3	Boston (Shore).....	1	At Philadelphia
9—Boston (Foster).....	2	Philadelphia (Mayer).....	1	At Philadelphia
11—Boston (Leonard).....	2	Philadelphia (Alexander).....	1	At Boston
12—Boston (Shore).....	2	Philadelphia (Chalmers).....	1	At Boston
13—Boston (Foster).....	5	Philadelphia (Rixey).....	4	At Philadelphia

Managers—William Carrigan, Boston; Patrick J. Moran, Philadelphia.

1916—BOSTON A. L. (4) vs. BROOKLYN N. L. (1)

7—Boston (Shore).....	6	Brooklyn (Marquard).....	5	At Boston
9—Boston (Ruth).....	2	Brooklyn (Smith).....	1	At Boston (14 inn.)
10—Brooklyn (Coombs).....	4	Boston (Mays).....	3	At Brooklyn
11—Boston (Leonard).....	6	Brooklyn (Marquard).....	2	At Brooklyn
12—Boston (Shore).....	4	Brooklyn (Pfeffer).....	1	At Boston

Managers—William Carrigan, Boston; Wilbert J. Robinson, Brooklyn.

1917—CHICAGO A. L. (4) vs. NEW YORK N. L. (2)

6—Chicago (Cicotte).....	2	New York (Sallee).....	1	At Chicago
7—Chicago (Faber).....	7	New York (Anderson).....	2	At Chicago
10—New York (Benton).....	2	Chicago (Cicotte).....	0	At New York
11—New York (Schupp).....	5	Chicago (Faber).....	0	At New York
13—Chicago (Faber).....	8	New York (Sallee).....	5	At Chicago
15—Chicago (Faber).....	4	New York (Benton).....	2	At New York

Managers—Clarence H. Rowland, Chicago; John J. McGraw, New York.

1918—BOSTON A. L. (4) vs. CHICAGO N. L. (2)

5—Boston (Ruth).....	1	Chicago (Vaughn).....	0	At Chicago
6—Chicago (Tyler).....	3	Boston (Bush).....	1	At Chicago
7—Boston (Mays).....	2	Chicago (Vaughn).....	1	At Chicago
9—Boston (Ruth).....	3	Chicago (Douglas).....	2	At Boston
10—Chicago (Vaughn).....	3	Boston (Jones).....	0	At Boston
11—Boston (Mays).....	2	Chicago (Tyler).....	1	At Boston

Managers—E. G. Barrow, Boston; Fred P. Mitchell, Chicago.

1919—CINCINNATI N. L. (5) vs. CHICAGO A. L. (3)

Oct. 1—Cincinnati (Ruether).....	9	Chicago (Cicotte).....	1	At Cincinnati
Oct. 2—Cincinnati (Sallee).....	4	Chicago (Williams).....	2	At Cincinnati
Oct. 3—Chicago (Kerr).....	3	Cincinnati (Fisher).....	0	At Chicago
Oct. 4—Cincinnati (Ring).....	2	Chicago (Cicotte).....	0	At Chicago
Oct. 6—Cincinnati (Eller).....	5	Chicago (Williams).....	0	At Chicago
Oct. 7—Chicago (Kerr).....	5	Cincinnati (Ring).....	4	At Cincinnati
Oct. 8—Chicago (Cicotte).....	4	Cincinnati (Sallee).....	1	At Cincinnati
Oct. 9—Cincinnati (Eller).....	10	Chicago (Williams).....	5	At Chicago (10 inn.)

Managers—Patrick J. Moran, Cincinnati; William Gleason, Chicago.

1920—CLEVELAND A. L. (5) vs. BROOKLYN N. L. (2)

Oct. 5—Cleveland (Coveleskie).....	3	Brooklyn (Marquard).....	1	At Brooklyn
Oct. 6—Brooklyn (Grimes).....	3	Cleveland (Bagby).....	0	At Brooklyn
Oct. 7—Brooklyn (Smith).....	2	Cleveland (Caldwell).....	1	At Brooklyn
Oct. 9—Cleveland (Coveleskie).....	5	Brooklyn (Cadore).....	1	At Cleveland
Oct. 10—Cleveland (Bagby).....	8	Brooklyn (Grimes).....	1	At Cleveland
Oct. 11—Cleveland (Mails).....	1	Brooklyn (Smith).....	0	At Cleveland
Oct. 12—Cleveland (Coveleskie).....	3	Brooklyn (Grimes).....	0	At Cleveland

Managers—Tris Speaker, Cleveland; Wilbert J. Robinson, Brooklyn

1921—NEW YORK N. L. (5) vs. NEW YORK A. L. (3)

Oct. 5—New York A (Mays).....	3	New York N (Nehf).....	0	At Polo Grounds
Oct. 6—New York A (Hoyt).....	3	New York N (Douglas).....	0	At Polo Grounds
Oct. 7—New York N (Barnes).....	13	New York A (Quinn).....	5	At Polo Grounds
Oct. 9—New York N (Douglas).....	4	New York A (Mays).....	2	At Polo Grounds
Oct. 10—New York A (Hoyt).....	3	New York N (Nehf).....	1	At Polo Grounds
Oct. 11—New York N (Barnes).....	8	New York A (Shawkey).....	5	At Polo Grounds
Oct. 12—New York N (Douglas).....	2	New York A (Mays).....	1	At Polo Grounds
Oct. 13—New York N (Nehf).....	1	New York A (Hoyt).....	0	At Polo Grounds

Managers—John J. McGraw, New York N. L.; Miller J. Huggins, New York A. L.

1922—NEW YORK N. L. (4) vs. NEW YORK A. L. (0)

Oct. 4—New York N (Ryan).....	3	New York A (Bush).....	2	At Polo Grounds
Oct. 5—New York N (tie).....	3	New York A (tie).....	3	At Polo Grounds (10 inn.)
Oct. 6—New York N (Scott).....	3	New York A (Hoyt).....	0	At Polo Grounds
Oct. 7—New York N (McQuillan).....	4	New York A (Mays).....	3	At Polo Grounds
Oct. 8—New York N (Nehf).....	5	New York A (Bush).....	3	At Polo Grounds

Managers—John J. McGraw, New York N. L.; Miller J. Huggins, New York A. L.

1923—NEW YORK A. L. (4) vs. NEW YORK N. L. (2)

Oct. 10—New York N (Ryan).....	5	New York A (Bush).....	4	At Yankee Stadium
Oct. 11—New York A (Pennock).....	4	New York N (McQuillan).....	2	At Polo Grounds
Oct. 12—New York N (Nehf).....	1	New York A (Jones).....	0	At Yankee Stadium
Oct. 13—New York A (Shawkey).....	8	New York N (Scott).....	4	At Polo Grounds
Oct. 14—New York A (Bush).....	8	New York N (Bentley).....	1	At Yankee Stadium
Oct. 15—New York A (Pennock).....	6	New York N (Nehf).....	4	At Polo Grounds

Managers—Miller J. Huggins, New York A. L.; John J. McGraw, New York N. L.

1924—WASHINGTON A. L. (4) vs. NEW YORK N. L. (3)

Oct. 4—New York (Nehf).....	4	Washington (Johnson).....	3	At Washington (12 inn.)
Oct. 5—Washington (Zachary).....	4	New York (Bentley).....	3	At Washington
Oct. 6—New York (McQuillan).....	6	Washington (Marberry).....	4	At New York
Oct. 7—Washington (Mogridge).....	7	New York (Barnes).....	4	At New York
Oct. 8—New York (Bentley).....	6	Washington (Johnson).....	2	At New York
Oct. 9—Washington (Zachary).....	2	New York (Nehf).....	1	At Washington
Oct. 10—Washington (Johnson).....	4	New York (Bentley).....	3	At Washington (12 inn.)

Managers—Stanley R. Harris, Washington; John J. McGraw, New York.

1925—PITTSBURGH N. L. (4) vs. WASHINGTON A. L. (3)

7—Washington (Johnson).....	4	Pittsburgh (Meadows).....	1	At Pittsburgh
8—Pittsburgh (Aldridge).....	3	Washington (Coveleskie).....	2	At Pittsburgh
10—Washington (Ferguson).....	4	Pittsburgh (Kremer).....	3	At Washington
11—Washington (Johnson).....	4	Pittsburgh (Yde).....	0	At Washington
12—Pittsburgh (Aldridge).....	6	Washington (Coveleskie).....	3	At Washington
13—Pittsburgh (Kremer).....	3	Washington (Ferguson).....	2	At Pittsburgh
15—Pittsburgh (Kremer).....	9	Washington (Johnson).....	7	At Pittsburgh

Managers—William B. McKechnie, Pittsburgh; Stanley R. Harris, Washington.

1926—ST. LOUIS N. L. (4) vs. NEW YORK A. L. (3)

2—New York (Pennock).....	2	St. Louis (Sherdel).....	1	At New York
3—St. Louis (Alexander).....	6	New York (Shocker).....	2	At New York
5—St. Louis (Haines).....	4	New York (Ruether).....	0	At St. Louis
6—New York (Hoyt).....	10	St. Louis (Reinhart).....	5	At St. Louis
7—New York (Pennock).....	3	St. Louis (Sherdel).....	2	At St. Louis (10 inn.)
9—St. Louis (Alexander).....	10	New York (Shawkey).....	2	At New York
10—St. Louis (Haines).....	3	New York (Hoyt).....	2	At New York

Managers—Rogers Hornsby, St. Louis; Miller J. Huggins, New York.

1927—NEW YORK A. L. (4) vs. PITTSBURGH N. L. (0)

5—New York (Hoyt).....	5	Pittsburgh (Kremer).....	4	At Pittsburgh
6—New York (Pipgras).....	6	Pittsburgh (Aldridge).....	2	At Pittsburgh
7—New York (Pennock).....	8	Pittsburgh (Meadows).....	1	At New York
8—New York (Moore).....	4	Pittsburgh (Miljus).....	3	At New York

Managers—Miller J. Huggins, New York; Owen J. Bush, Pittsburgh.

1928—NEW YORK A. L. (4) vs. ST. LOUIS N. L. (0)

4—New York (Hoyt).....	4	St. Louis (Sherdel).....	1	At New York
5—New York (Pipgras).....	9	St. Louis (Alexander).....	3	At New York
7—New York (Zachary).....	7	St. Louis (Haines).....	3	At St. Louis
9—New York (Hoyt).....	7	St. Louis (Sherdel).....	3	At St. Louis

Managers—Miller J. Huggins, New York; William B. McKechnie, St. Louis.

1929—PHILADELPHIA A. L. (4) vs. CHICAGO N. L. (1)

8—Philadelphia (Ehmke).....	3	Chicago (Root).....	1	At Chicago
9—Philadelphia (Earnshaw).....	9	Chicago (Malone).....	3	At Chicago
11—Chicago (Bush).....	3	Philadelphia (Earnshaw).....	1	At Philadelphia
12—Philadelphia (Rommel).....	10	Chicago (Blake).....	8	At Philadelphia
14—Philadelphia (Walberg).....	3	Chicago (Malone).....	2	At Philadelphia

Managers—Connie Mack, Philadelphia; Joseph V. McCarthy, Chicago.

1930—PHILADELPHIA A. L. (4) vs. ST. LOUIS N. L. (2)

1—Philadelphia (Grove).....	5	St. Louis (Grimes).....	2	At Philadelphia
2—Philadelphia (Earnshaw).....	6	St. Louis (Rhem).....	1	At Philadelphia
4—St. Louis (Hallahan).....	5	Philadelphia (Walberg).....	0	At St. Louis
5—St. Louis (Haines).....	3	Philadelphia (Grove).....	1	At St. Louis
6—Philadelphia (Grove).....	2	St. Louis (Grimes).....	0	At St. Louis
8—Philadelphia (Earnshaw).....	8	St. Louis (Hallahan).....	1	At Philadelphia

Managers—Connie Mack, Philadelphia; Charles E. Street, St. Louis.

1931—ST. LOUIS N. L. (4) vs. PHILADELPHIA A. L. (3)

1—Philadelphia (Grove).....	6	St. Louis (Derringer).....	2	At St. Louis
2—St. Louis (Hallahan).....	2	Philadelphia (Earnshaw).....	0	At St. Louis
5—St. Louis (Grimes).....	5	Philadelphia (Grove).....	2	At Philadelphia
6—Philadelphia (Earnshaw).....	3	St. Louis (Johnson).....	0	At Philadelphia
7—St. Louis (Hallahan).....	5	Philadelphia (Hoyt).....	1	At Philadelphia
9—Philadelphia (Grove).....	8	St. Louis (Derringer).....	1	At St. Louis
10—St. Louis (Grimes).....	4	Philadelphia (Earnshaw).....	2	At St. Louis

Managers—Charles E. Street, St. Louis; Connie Mack, Philadelphia.

1932—NEW YORK A. L. (4) vs. CHICAGO N. L. (0)

Sept. 28—New York (Ruffing).....	12	Chicago (Bush).....	6	At New York
Sept. 29—New York (Gomez).....	5	Chicago (Warneke).....	2	At New York
Oct. 1—New York (Pigra).....	7	Chicago (Root).....	5	At Chicago
Oct. 2—New York (Moore).....	13	Chicago (May).....	6	At Chicago

Managers—Joseph V. McCarthy, New York; Charles J. Grimm, Chicago.

1933—NEW YORK N. L. (4) vs. WASHINGTON A. L. (1)

Oct. 3—New York (Hubbell).....	4	Washington (Stewart).....	2	At New York
Oct. 4—New York (Schumacher).....	6	Washington (Crowder).....	1	At New York
Oct. 5—Washington (Whitehill).....	4	New York (Fitzsimmons).....	0	At Washington
Oct. 6—New York (Hubbell).....	2	Washington (Weaver).....	1	At Washington (11 inn.)
Oct. 7—New York (Luque).....	4	Washington (Russell).....	3	At Washington (10 inn.)

Managers—William H. Terry, New York; Joseph E. Cronin, Washington.

1934—ST. LOUIS N. L. (4) vs. DETROIT A. L. (3)

Oct. 3—St. Louis (J. Dean).....	8	Detroit (Crowder).....	3	At Detroit
Oct. 4—Detroit (Rowe).....	3	St. Louis (W. Walker).....	2	At Detroit (12 inn.)
Oct. 5—St. Louis (P. Dean).....	4	Detroit (Bridges).....	1	At St. Louis
Oct. 6—Detroit (Auker).....	10	St. Louis (W. Walker).....	4	At St. Louis
Oct. 7—Detroit (Bridges).....	3	St. Louis (J. Dean).....	1	At St. Louis
Oct. 8—St. Louis (P. Dean).....	4	Detroit (Rowe).....	3	At Detroit
Oct. 9—St. Louis (J. Dean).....	11	Detroit (Auker).....	0	At Detroit

Managers—Frank F. Frisch, St. Louis; Gordon S. Cochrane, Detroit.

1935—DETROIT A. L. (4) vs. CHICAGO N. L. (2)

Oct. 2—Chicago (Warneke).....	3	Detroit (Rowe).....	0	At Detroit
Oct. 3—Detroit (Bridges).....	8	Chicago (Root).....	3	At Detroit
Oct. 4—Detroit (Rowe).....	6	Chicago (French).....	5	At Chicago (11 inn.)
Oct. 5—Detroit (Crowder).....	2	Chicago (Carleton).....	1	At Chicago
Oct. 6—Chicago (Warneke).....	3	Detroit (Rowe).....	1	At Chicago
Oct. 7—Detroit (Bridges).....	4	Chicago (French).....	3	At Detroit

Managers—Gordon S. Cochrane, Detroit; Charles J. Grimm, Chicago.

1936—NEW YORK A. L. (4) vs. NEW YORK N. L. (2)

Sept. 30—Giants (Hubbell).....	6	Yankees (Ruffing).....	1	At Polo Grounds
Oct. 2—Yankees (Gomez).....	18	Giants (Schumacher).....	4	At Polo Grounds
Oct. 3—Yankees (Hadley).....	2	Giants (Fitzsimmons).....	1	At Yankee Stadium
Oct. 4—Yankees (Pearson).....	5	Giants (Hubbell).....	2	At Yankee Stadium
Oct. 5—Giants (Schumacher).....	5	Yankees (Malone).....	4	At Yankee Stadium (10 inn.)
Oct. 6—Yankees (Gomez).....	13	Giants (Fitzsimmons).....	5	At Polo Grounds

Managers—Joseph V. McCarthy, Yankees; William H. Terry, Giants.

1937—NEW YORK A. L. (4) vs. NEW YORK N. L. (1)

Oct. 6—Yankees (Gomez).....	8	Giants (Hubbell).....	1	At Yankee Stadium
Oct. 7—Yankees (Ruffing).....	8	Giants (Melton).....	1	At Yankee Stadium
Oct. 8—Yankees (Pearson).....	5	Giants (Schumacher).....	1	At Polo Grounds
Oct. 9—Giants (Hubbell).....	7	Yankees (Hadley).....	3	At Polo Grounds
Oct. 10—Yankees (Gomez).....	4	Giants (Melton).....	2	At Polo Grounds

Managers—Joseph V. McCarthy, Yankees; William H. Terry, Giants.

1938—NEW YORK A. L. (4) vs. CHICAGO N. L. (0)

Oct. 5—New York (Ruffing).....	3	Chicago (Lee).....	1	At Chicago
Oct. 6—New York (Gomez).....	6	Chicago (Dean).....	3	At Chicago
Oct. 8—New York (Pearson).....	5	Chicago (Bryant).....	2	At New York
Oct. 9—New York (Ruffing).....	8	Chicago (Lee).....	3	At New York

Managers—Joseph V. McCarthy, New York; Charles L. Hartnett, Chicago.

1939—NEW YORK A. L. (4) vs. CINCINNATI N. L. (0)

Oct. 4—New York (Ruffing).....	2	Cincinnati (Derringer).....	1	At New York
Oct. 5—New York (Pearson).....	4	Cincinnati (Walters).....	0	At New York
Oct. 7—New York (Hadley).....	7	Cincinnati (Thompson).....	3	At Cincinnati
Oct. 8—New York (Murphy).....	7	Cincinnati (Walters).....	4	At Cincinnati (10 inn.)

Managers—Joseph V. McCarthy, New York; William B. McKechnie, Cincinnati.

1940—CINCINNATI N. L. (4) vs. DETROIT A. L. (3)

2—Detroit (Newsom).....	7	Cincinnati (Derringer).....	2	At Cincinnati
3—Cincinnati (Walters).....	5	Detroit (Rowe).....	3	At Cincinnati
4—Detroit (Bridges).....	7	Cincinnati (Turner).....	4	At Detroit
5—Cincinnati (Derringer).....	5	Detroit (Trout).....	2	At Detroit
6—Detroit (Newsom).....	8	Cincinnati (Thompson).....	0	At Detroit
7—Cincinnati (Walters).....	4	Detroit (Rowe).....	0	At Cincinnati
8—Cincinnati (Derringer).....	2	Detroit (Newsom).....	1	At Cincinnati

Managers—William B. McKechnie, Cincinnati; Delmar D. Baker, Detroit.

1941—NEW YORK A. L. (4) vs. BROOKLYN N. L. (1)

1—New York (Ruffing).....	3	Brooklyn (Davis).....	2	At New York
2—Brooklyn (Wyatt).....	3	New York (Chandler).....	2	At New York
4—New York (Russo).....	2	Brooklyn (Casey).....	1	At Brooklyn
5—New York (Murphy).....	7	Brooklyn (Casey).....	4	At Brooklyn
6—New York (Bonham).....	3	Brooklyn (Wyatt).....	1	At Brooklyn

Managers—Joseph V. McCarthy, New York; Leo E. Durocher, Brooklyn.

1942—ST. LOUIS N. L. (4) vs. NEW YORK A. L. (1)

pt. 30—New York (Ruffing).....	7	St. Louis (M. Cooper).....	4	At St. Louis
1—St. Louis (Beazley).....	4	New York (Bonham).....	3	At St. Louis
3—St. Louis (White).....	2	New York (Chandler).....	0	At New York
4—St. Louis (Lanier).....	9	New York (Donald).....	6	At New York
5—St. Louis (Beazley).....	4	New York (Ruffing).....	2	At New York

Managers—William H. Southworth, St. Louis; Joseph V. McCarthy, New York.

1943—NEW YORK A. L. (4) vs. ST. LOUIS N. L. (1)

5—New York (Chandler).....	4	St. Louis (Lanier).....	2	At New York
6—St. Louis (M. Cooper).....	4	New York (Bonham).....	3	At New York
7—New York (Borowy).....	6	St. Louis (Brazle).....	2	At New York
10—New York (Russo).....	2	St. Louis (Brecheen).....	1	At St. Louis
11—New York (Chandler).....	2	St. Louis (M. Cooper).....	0	At St. Louis

Managers—Joseph V. McCarthy, New York; William H. Southworth, St. Louis.

1944—ST. LOUIS N. L. (4) vs. ST. LOUIS A. L. (2)

4—Browns (Galehouse).....	2	Cardinals (M. Cooper).....	1	At Sportsman's Park
5—Cardinals (Donnelly).....	3	Browns (Muncier).....	2	At Sportsman's Pk. (11 inn.)
6—Browns (Kramer).....	6	Cardinals (Wilks).....	2	At Sportsman's Park
7—Cardinals (Brecheen).....	5	Browns (Jakucki).....	1	At Sportsman's Park
8—Cardinals (M. Cooper).....	2	Browns (Galehouse).....	0	At Sportsman's Park
9—Cardinals (Lanier).....	3	Browns (Potter).....	1	At Sportsman's Park

Managers—William H. Southworth, Cardinals; J. Luther Sewell, Browns.

1945—DETROIT A. L. (4) vs. CHICAGO N. L. (3)

3—Chicago (Borowy).....	9	Detroit (Newhouser).....	0	At Detroit
4—Detroit (Trucks).....	4	Chicago (Wyse).....	1	At Detroit
5—Chicago (Passeau).....	3	Detroit (Overmire).....	0	At Detroit
6—Detroit (Trout).....	4	Chicago (Prim).....	1	At Chicago
7—Detroit (Newhouser).....	8	Chicago (Borowy).....	4	At Chicago
8—Chicago (Borowy).....	8	Detroit (Trout).....	7	At Chicago (12 inn.)
10—Detroit (Newhouser).....	9	Chicago (Borowy).....	3	At Chicago

Managers—Stephen F. O'Neill, Detroit; Charles J. Grimm, Chicago.

1946—ST. LOUIS N. L. (4) vs. BOSTON A. L. (3)

6—Boston (Johnson).....	3	St. Louis (Pollet).....	2	At St. Louis (10 innings)
7—St. Louis (Brecheen).....	3	Boston (Harris).....	0	At St. Louis
9—Boston (Ferriss).....	4	St. Louis (Dickson).....	0	At Boston
10—St. Louis (Munger).....	12	Boston (Hughson).....	3	At Boston
11—Boston (Dobson).....	6	St. Louis (Brazle).....	3	At Boston
13—St. Louis (Brecheen).....	4	Boston (Harris).....	1	At St. Louis
15—St. Louis (Brecheen).....	4	Boston (Klinger).....	3	At St. Louis

Managers—Edward Dyer, St. Louis; Joseph E. Cronin, Boston.

World Series Box Scores, 1946

FIRST GAME

At St. Louis, Oct. 6

A home run by Rudy York with two out in the tenth inning gave the heavily-favored Red Sox a 3-to-2 decision over the Cardinals in the first game. The Redbirds were leading, 2 to 1, entering the ninth inning, but the Red Sox sent the game into overtime, by tying the score with two out.

BOSTON (A)

	ab.	r.	h.	po.	a.	e.
McBride, rf	5	0	1	1	0	1
Moses, rf	0	0	0	1	0	0
Pesky, ss	5	0	0	0	3	1
DiMaggio, cf	5	0	2	1	1	0
Williams, lf	3	0	1	4	0	0
York, 1b	4	2	1	10	0	0
Doerr, 2b	4	0	1	4	4	0
Higgins, 3b	4	0	2	2	0	0
aGutteridge	0	1	0	0	0	0
Johnson, p	1	0	0	0	2	0
H. Wagner, c	3	0	0	6	1	0
Russell, 3b	1	0	1	0	0	0
Hughson, p	2	0	0	0	1	0
Partee, c	1	0	0	1	0	0
Total	38	3	9	30	12	2

ST. LOUIS (N)

	ab.	r.	h.	po.	a.	e.
Schoendienst, 2b	5	1	2	2	4	0
Moore, cf	4	0	0	3	1	0
Musial, 1b	5	0	1	13	0	0
Slaughter, rf	4	0	1	3	0	0
Kurowski, 3b	3	1	1	1	4	0
Garagiola, c	4	0	1	4	0	0
Walker, lf	2	0	1	3	0	0
Dusak, lf	1	0	0	0	0	0
Marlon, ss	3	0	0	1	3	0
Pollet, p	4	0	0	0	0	0
Total	35	2	7	30	12	0

aRan for Higgins in ninth.

Boston	0	1	0	0	0	0	1	1—3
St. Louis	0	0	0	0	1	0	1	0—2

Runs batted in—Higgins, Musial, Garagiola, McBride, York.

Two-base hits—Musial, Garagiola. Three-base hit—Slaughter. Home run—York. Stolen base—Schoendienst. Sacrifices—Marlon, Moore. Earned runs—Boston 3, St. Louis 2. Left on bases—Boston 10, St. Louis 8. Bases on balls—Off Pollet 4 (Doerr, Williams 2, Hughson); Hughson 2 (Slaughter, Walker). Struck out—By Hughson 5 (Kurowski, Moore, Walker, Garagiola, Pollet); Pollet 3 (McBride, Doerr, Partee); Johnson 1 (Marlon).

Pitching summary—Off Hughson 7 hits, 2 runs in 8 innings; Johnson 0 hits, 0 runs in 2. Hit by pitcher—By Pollet (York); Hughson (Kurowski). Winning pitcher—Johnson. Umpires—Ballanfant (NL), plate; Hubbard (AL), 1b; Barlick (NL), 2b; Berry (AL), 3b. Time of game—2:39. Attendance—36,218.

SECOND GAME

At St. Louis, Oct. 7

Harry (The Cat) Brecheen, ace Cardinal southpaw, was the dominant figure as the Redbirds blanked the Red Sox, 3 to 0, in the second game and evened the series. Brecheen, in command all the way, allowed four hits and drove in the first Cardinal run in the third inning. In the sixth frame the Cards scored their final two runs by capitalizing on two hits, an error and a force play.

BOSTON (A)

	ab.	r.	h.	po.	a.	e.
McBride, rf	4	0	1	3	0	0
Pesky, ss	4	0	0	3	2	0
DiMaggio, cf	4	0	1	3	0	0
Williams, lf	4	0	0	1	0	0
York, 1b	2	0	0	6	2	0
Doerr, 2b	4	0	1	4	5	0
Higgins, 3b	2	0	0	0	2	1
Partee, c	2	0	0	1	0	0
H. Wagner, c	1	0	0	2	0	0
Harris, p	2	0	1	1	0	0
aCulberson	1	0	0	0	0	0
Total	30	0	4	24	11	1

ST. LOUIS (N)

	ab.	r.	h.	po.	a.	e.
Schoendienst, 2b	3	0	0	2	3	0
Moore, cf	3	0	1	3	0	0
Musial, 1b	4	0	0	11	0	0
Kurowski, 3b	4	0	1	1	1	0
Slaughter, rf	4	0	0	2	0	0
Dusak, lf	2	0	1	1	0	0
bSisler	1	0	0	0	0	0
Walker, lf	0	0	0	1	0	0
Marlon, ss	4	0	0	2	6	0
Rice, c	2	2	2	4	0	0
Brecheen, p	3	1	1	0	0	0
Total	30	3	6	27	10	0

aBatted for Harris in eighth.

bBatted for Dusak in eighth.

Boston	0	0	0	0	0	0	0	0—0
St. Louis	0	0	1	0	2	0	0	0—3

Runs batted in—Brecheen, Moore, Musial.

Two-base hits—Rice, Dusak. Sacrifice—Schoendienst. Double play—Marlon and Musial. Earned runs—Boston 0, St. Louis 2. Left on bases—Boston 6, St. Louis 7. Bases on balls—Off Brecheen 3 (York 2, Higgins); Harris 3 (Dusak, Rice, Moore). Struck out—By Brecheen 4 (Pesky, Harris, Williams, H. Wagner); Harris 3 (Dusak, Brecheen, Musial).

Pitching summary—Off Harris 6 hits 3 runs in 7 innings; Dobson 0 hits 0 runs in 1. Losing pitcher—Harris.

Umpires—Hubbard (AL), plate; Barlick (NL), 1b; Berry (AL), 2b; Ballanfant (NL), 3b. Time of game—1:56. Attendance—35,815.

THIRD GAME

At Boston, Oct. 9

The combination of Dave Ferriss' superb pitching and Rudy York's hitting was too much for the Cardinals to hurdle in the third game, which went to the Red Sox, 4 to 0. York came through with his second home run of the series, this time with two men in the first inning.

ST. LOUIS (N)

	ab.	r.	h.	po.	a.	e.
Schoendienst, 2b	4	0	0	3	2	1
Moore, cf	4	0	0	1	0	0
Musial, 1b	3	0	1	8	1	0
Slaughter, rf	4	0	1	4	0	0
Kurowski, 3b	3	0	0	1	0	0
Garagiola, c	3	0	1	3	1	0
Walker, lf	3	0	1	2	0	0
Marion, ss	3	0	1	2	3	0
Dickson, p	2	0	1	0	2	0
Sisler	1	0	0	0	0	0
Wilks, p	0	0	0	0	1	0
Total	30	0	6	24	10	1

BOSTON (A)

	ab.	r.	h.	po.	a.	e.
Moses, rf	3	0	0	2	0	0
Pesky, ss	4	1	2	1	3	0
DiMaggio, cf	4	0	1	4	1	0
Williams, lf	3	1	1	2	0	0
York, 1b	4	2	2	12	0	0
Doerr, 2b	4	0	2	2	8	0
Higgins, 3b	3	0	0	1	0	0
H. Wagner, c	3	0	0	3	0	0
Ferriss, p	4	0	0	0	3	0
Total	32	4	8	27	15	0

aBatted for Dickson in eighth.
St. Louis 0 0 0 0 0 0 0 0—0
Boston 3 0 0 0 0 0 1 —4
Runs batted in—York 3.

Two-base hits—DiMaggio, Dickson, Doerr. Three-base hit—Musial. Home run—York. Stolen base—Musial. Sacrifice—H. Wagner. Double plays—DiMaggio and Pesky; Pesky, Doerr and York. Passed ball—Garagiola. Earned runs—St. Louis 0, Boston 3. Left on bases—St. Louis 4, Boston 8. Bases on balls—Off Ferriss 1 (Musial); Dickson 3 (Williams, Higgins, Moses). Struck out—By Dickson 4 (Doerr, Ferriss, Moses, Williams); Ferriss 2 (Moore, Slaughter).

Pitching summary—Off Dickson 6 hits, runs in 7 innings; Wilks 2 hits, 1 run in 1. Losing pitcher—Dickson.

Umpires—Barlick (NL), plate; Berry (AL), 1b; Ballanfant (NL), 2b; Hubbard (AL), 3b. Time of game—1:54. Attendance—34,500.

FOURTH GAME

At Boston, Oct. 10

The Cardinals walloped six Red Sox pitchers for a record-tying twenty hits in the fourth game and won easily, 12 to 3.

ST. LOUIS (N)

	ab.	r.	h.	po.	a.	e.
Schoendienst, 2b	6	1	1	1	4	0
Moore, cf	4	1	1	3	0	0
Musial, 1b	5	1	1	6	1	0
Slaughter, rf	6	4	4	5	1	0
Kurowski, 3b	5	2	4	2	0	0
Garagiola, c	5	1	4	4	0	0
Walker, lf	2	1	1	3	0	0
Marion, ss	4	1	3	2	1	1
Munger, p	4	0	1	1	0	0
Total	41	12	20	27	7	1

BOSTON (A)

	ab.	r.	h.	po.	a.	e.
Moses, rf	5	0	4	1	0	0
Pesky, ss	5	0	0	3	2	1
DiMaggio, cf	4	1	0	3	1	0
Williams, lf	3	1	1	0	1	0
York, 1b	3	0	1	9	1	0
Doerr, 2b	3	1	2	4	6	0
Gutteridge, 2b	0	0	0	0	0	0
Higgins, 3b	4	0	1	2	1	1
H. Wagner, c	4	0	0	5	1	0
Hughson, p	0	0	0	0	0	1
Bagby, p	1	0	0	0	1	0
aMetkovich	1	0	0	0	0	0
Zuber, p	0	0	0	0	0	0
bMcBride	1	0	0	0	0	0
Brown, p	0	0	0	0	0	0
Ryba, p	0	0	0	0	0	1
Dreisewerd, p	0	0	0	0	0	0
cCulberson	1	0	0	0	0	0
Total	35	3	9	27	14	4

aBatted for Bagby in fifth.
bBatted for Zuber in seventh.
cBatted for Dreisewerd in ninth.
St. Louis 0 3 3 0 1 0 1 0 4—12
Boston 0 0 0 1 0 0 0 2 0—3

Runs batted in—Slaughter, Walker, Marion 3, Musial 2, Garagiola 3, York, Kurowski, Doerr 2.

Two-base hits—Kurowski 2, Musial, York, Slaughter, Garagiola, Marion. Home runs—Slaughter, Doerr. Sacrifices—Marion, Moore, Munger, Walker. Double plays—Slaughter and Garagiola; Doerr, Pesky and York; Schoendienst and Musial; Pesky and Doerr. Earned runs—St. Louis 8, Boston 1. Left on bases—St. Louis 10, Boston 8. Bases on balls—Off Munger 3 (Williams, Doerr, York); Bagby 1 (Walker); Zuber 1 (Walker); Brown 1 (Moore); Ryba 1 (Musial). Struck out—By Hughson 1 (Munger); Bagby 1 (Walker); Zuber 1 (Munger); Munger 2 (Pesky, York).

Pitching summary—Off Hughson 5 hits, 6 runs in 2 innings (none out in 3d); Bagby 6 hits, 1 run in 3; Zuber 3 hits, 1 run in 2; Brown 4 hits, 3 runs in 1 (none out in 9th); Ryba 2 hits, 1 run in 2/3; Dreisewerd 0 hits, 0 runs in 1/3. Losing pitcher—Hughson.

Umpires—Berry (AL), plate; Ballanfant (NL), 1b; Hubbard (AL), 2b; Barlick (NL), 3b. Time of game—2:31. Attendance—35,645.

FIFTH GAME

At Boston, Oct. 11

Bouncing back from their humiliating defeat of the previous day, the Red Sox, behind the four-hit pitching of Joe Dobson, one of the lesser lights on the hurling staff, easily outscored the Cardinals, 6 to 3, in the fifth game. Dobson, who throws what he calls an "atom bomb pitch," struck out eight Redbirds.

ST. LOUIS (N)

	ab.	r.	h.	po.	a.	e.
Schoendienst, 2b ..	4	0	1	3	1	0
Moore, cf	4	0	0	2	0	0
Musial, 1b	3	1	1	7	0	0
Slaughter, rf	2	0	0	0	0	0
Dusak, lf	1	0	0	0	0	0
Kurowski, 3b	4	1	0	3	1	0
Garagiola, c	4	1	0	7	1	0
Walker, lf-rf	4	0	2	1	0	0
Marion, ss	4	0	0	1	7	1
Pollet, p	0	0	0	0	0	0
Brazle, p	2	0	0	0	1	0
aJones	1	0	0	0	0	0
Beazley, p	0	0	0	0	1	0
Total	33	3	4	24	12	1

BOSTON (A)

	ab.	r.	h.	po.	a.	e.
Gutteridge, 2b	5	0	2	0	2	0
Pesky, ss	5	1	3	2	2	2
DiMaggio, cf	3	1	1	3	0	0
Williams, lf	5	0	1	4	0	0
York, 1b	2	1	0	8	0	1
Higgins, 3b	4	1	1	0	1	0
Culberson, rf	3	1	2	2	0	0
Partee, c	3	1	1	8	1	0
Dobson, p	3	0	0	0	1	0
Total	33	6	11	27	7	3

aBatted for Brazle in eighth.

St. Louis	0	1	0	0	0	0	2	—3
Boston	1	1	0	0	0	1	3	—6

Runs batted in—Williams, Walker 3, Gutteridge, Culberson, Higgins, Partee.

Two-base hits—Walker, Musial, DiMaggio, Higgins. Home run—Culberson. Stolen bases—Slaughter, Culberson, Pesky. Sacrifices—Dobson, DiMaggio. Double plays—Partee and Pesky; Marion, Schoendienst and Musial. Earned runs—St. Louis 0, Boston 5. Left on bases—St. Louis 5, Boston 11. Bases on balls—Off Brazle 6 (York 3, DiMaggio, Partee, Culberson); Dobson 1 (Musial). Struck out—By Dobson 8 (Moore 2, Kurowski 2, Slaughter, Jones, Schoendienst, Dusak); Brazle 4 (Williams 2, Dobson 2); Beazley 1 (York).

Pitching summary—Off Pollet 3 hits, 1 run in $\frac{1}{3}$ inning; Brazle 7 hits, 5 runs in $6\frac{2}{3}$; Beazley 1 hit 0 runs in 1. Hit by pitcher—By Dobson (Slaughter). Wild pitch—Beazley. Losing pitcher—Brazle.

Umpires—Ballanfant (NL), plate; Hubbard (AL), 1b; Barlick (NL), 2b; Berry (AL), 3b. Time of game—2:23. Attendance—35,982.

SIXTH GAME

At St. Louis, Oct. 13

In the sixth game Harry Brecheen of the Cards again handcuffed the Red Sox with a smooth performance that ended in a 4-to-1 victory for the Redbirds. After a shaky start, in which he was equal to the task of making the redoubtable Rudy York hit into a double-play with the bases filled, the southpaw hit the stride he had shown in the second game to register his second series triumph.

BOSTON (A)

	ab.	r.	h.	po.	a.	e.
Culberson, rf	4	0	0	5	0	0
Pesky, ss	3	0	1	2	3	0
DiMaggio, cf	4	0	1	5	0	0
Williams, lf	3	0	1	2	0	0
York, 1b	4	1	1	4	0	0
Doerr, 2b	3	0	1	1	1	0
Higgins, 3b	3	0	1	1	1	0
Partee, c	3	0	0	4	0	0
Harris, p	1	0	0	0	0	0
Hughson, p	1	0	1	0	0	0
aMcBride	1	0	0	0	0	0
Johnson, p	0	0	0	0	0	0
Total	30	1	7	24	5	0

ST. LOUIS (N)

	ab.	r.	h.	po.	a.	e.
Schoendienst, 2b ..	4	1	1	4	3	0
Moore, cf	4	0	1	2	0	0
Musial, 1b	4	1	1	9	0	0
Kurowski, 3b	4	0	1	2	2	0
Slaughter, rf	2	0	1	2	0	0
Dusak, lf	0	0	0	0	1	0
Walker, lf	3	1	0	1	0	0
Marion, ss	4	0	2	2	1	0
Rice, c	3	0	1	5	1	0
Brecheen, p	4	1	0	0	2	0
Total	32	4	8	27	10	0

aBatted for Hughson in eighth.

Boston	0	0	0	0	0	1	0	—1
St. Louis	0	0	3	0	0	0	1	—4

Runs batted in—Moore, Kurowski, Slaughter, Doerr, Marion.

Two-base hits—Schoendienst, Marion. Three-base hit—York. Double plays—Kurowski, Schoendienst and Musial 2; Brecheen, Schoendienst, Marion and Musial. Earned runs—Boston 1, St. Louis 4. Left on bases—Boston 4, St. Louis 8. Bases on balls—Off Brecheen 2 (Williams, Pesky); Harris 1 (Dusak); Hughson 1 (Slaughter); Johnson 2 (Slaughter, Rice). Struck out—By Brecheen 6 (Culberson 2, Partee, DiMaggio, Williams, Pesky); Harris 2 (Moore, Slaughter); Hughson 2 (Moore, Musial).

Pitching summary—Off Harris 5 hits, 3 runs in $2\frac{2}{3}$ innings; Hughson 2 hits, 0 runs in $4\frac{1}{3}$; Johnson 1 hit, 1 run in 1. Losing pitcher—Harris.

Umpires—Hubbard (AL), plate; Barlick (NL), 1b; Berry (AL), 2b; Ballanfant (NL), 3b. Time of game—1:56. Attendance—35,768.

SEVENTH GAME

At St. Louis, Oct. 15

The sixteenth million-dollar series went down in history with the Cardinals topping the still heavily-favored Red Sox, 4 to 3, in the finale and annexing the world championship, four games to three. Daring base running by Enos Slaughter and excellent relief hurling by Harry Brecheen turned the tide in the Redbirds' favor.

The Red Sox did not give up without a struggle. They gained a one-run edge in the first frame and, after the Cards had gone ahead, 3 to 1, in the seventh, came back with two runs in the top of the eighth to tie the score.

But the inspired Cardinals could not be stopped. Slaughter singled to start their half of the eighth. Whitey Kurowski and Mel Rice were erased without advancing Slaughter. Then Harry Walker hit a double to left center and Slaughter, aided by slow fielding, made a sensational tour of the bases to score the winning run.

Brecheen, rushed in with only one day's rest, surrendered a double by Dom DiMaggio that chased in Boston's two runs in the eighth to tie the score, but from then on he took command and was credited with the victory. He thus became the first southpaw in the history of the classic to win three games in a single series.

The Cardinals' triumph enabled them to maintain their record of never having lost a seven-game series, while the Red Sox were humbled for the first time in series competition.

WORLD SERIES STATISTICS Final Standing of Clubs

	w.	l.	pct.
St. Louis (N)	4	3	.571
Boston (A)	3	4	.429

Seven-Game Totals

Paid attendance—250,071.
Gross receipts—\$1,052,920.
*Players' share—\$304,141.25.
Commissioner's share—\$157,934.
Each club's share—\$147,965.98.
Each league's share—\$147,965.98.

*Players participate in receipts of first four games only.

On Sept. 23, One-Nine-O-Eight,
never shall I forget the date)
The Giant Merkle—alas! alack!
Forgot to touch the keystone sack.
Discovered by Evers, the Cub's lieutenant;
And hence Chicago won the pennant.*

—F. P. A.

*And went on to beat Detroit in the world Series, games to 1.

In October, 1912, in the Hub,
The Series was won by the Red Sox club,
For Giant Snodgrass—my, oh, my!—
Dropped a third-out easy fly.—F. P. A.

BOSTON (A)

	ab.	r.	h.	po.	a.	e.
Moses, rf	4	1	1	1	0	0
Pesky, ss	4	0	1	2	1	0
DiMaggio, cf	3	0	1	0	0	0
Culberson, cf	0	0	0	0	0	0
Williams, lf	4	0	0	3	1	0
York, lb	4	0	1	10	1	0
aCampbell	0	0	0	0	0	0
Doerr, 2b	4	0	2	3	7	0
Higgins, 3b	4	0	0	0	1	0
H. Wagner, c	2	0	0	4	0	0
bRussell	1	1	1	0	0	0
Partee, c	1	0	0	0	0	0
Ferriss, p	2	0	0	0	0	0
Dobson, p	0	0	0	0	1	0
cMetkovich	1	1	1	0	0	0
Klinger, p	0	0	0	1	0	0
Johnson, p	0	0	0	0	0	0
dMcBride	1	0	0	0	0	0
Total	35	3	8	24	12	0

ST. LOUIS (N)

	ab.	r.	h.	po.	a.	e.
Schoendienst, 2b	4	0	2	2	3	0
Moore, cf	4	0	1	3	0	0
Musial, lb	3	0	1	6	0	0
Slaughter, rf	3	1	1	4	0	0
Kurowski, 3b	4	1	1	3	1	1
Garagiola, c	3	0	0	4	0	0
Rice, c	1	0	0	0	0	0
Walker, lf	3	1	2	3	0	0
Marion, ss	2	0	0	2	1	0
Dickson, p	3	1	1	0	1	0
Brecheen, p	1	0	0	0	0	0
Total	31	4	9	27	6	1

aRan for York in ninth. bBatted for H. Wagner in eighth. cBatted for Dobson in eighth. dBatted for Johnson in ninth.

Boston	1	0	0	0	0	0	2	0	—3
St. Louis	0	1	0	0	2	0	0	1	x—4

Runs batted in—DiMaggio 3, Walker 2, Dickson, Schoendienst.

Two-base hits—Musial, Kurowski, Dickson, DiMaggio, Metkovich, Walker. Sacrifice—Marion. Earned runs—Boston 3, St. Louis 4. Left on bases—Boston 6, St. Louis 8. Bases on balls—Off Ferriss 1 (Musial); Dobson 2 (Slaughter, Walker); Dickson 1 (DiMaggio); Klinger 1 (Marion). Struck out—by Ferriss 2 (Slaughter, Dickson); Dickson 3 (DiMaggio, York 2); Brecheen 1 (Moses); Dobson 2 (Garagiola, Schoendienst).

Pitching summary—Off Ferriss, 7 hits, 3 runs in 4½ innings; Dobson, 0 hits, 0 runs in 2½; Klinger, 2 hits, 1 run in ¾; Johnson, 0 hits, 0 runs in ¾; Dickson, 5 hits, 3 runs in 7 (none out in 8th); Brecheen, 3 hits, 0 runs in 2. Winning pitcher—Brecheen. Losing pitcher—Klinger.

Umpires—Barlick (NL), plate; Berry (AL), 1b; Ballanfant (NL), 2b; Hubbard (AL), 3b. Time of game—2:17. Attendance—36,143.

COMPOSITE BOX SCORE

ST. LOUIS NATIONALS

	g.	ab.	r.	h.	2b.	3b.	hr.	rbi.	bb.	so.	Bat. avg.	po.	a.	e.	Fldg. avg.
Schoendienst, 2b	7	30	3	7	1	0	0	1	0	2	.233	17	21	1	.974
Moore, cf	7	27	1	4	0	0	0	2	2	6	.148	17	1	0	1.000
Musial, 1b	7	27	3	6	4	1	0	4	4	2	.222	60	2	0	1.000
Slaughter, rf	7	25	5	8	1	1	1	2	4	3	.320	20	1	0	1.000
Kurowski, 3b	7	27	5	8	3	0	0	2	0	3	.296	13	9	1	.957
Garagiola, c	5	19	2	6	2	0	0	4	0	3	.326	22	2	0	1.000
Rice, c	3	6	2	3	1	0	0	0	2	0	.500	9	1	0	1.000
Walker, lf-rf	7	17	3	7	2	0	0	6	4	2	.412	14	0	0	1.000
Dusak, lf	4	4	0	1	1	0	0	0	2	2	.250	1	1	0	1.000
Marion, ss	7	24	1	6	2	0	0	4	1	1	.250	12	22	2	.944
Pollet, p	2	4	0	0	0	0	0	0	0	1	.000	0	0	0	.000
Brecheen, p	3	8	2	1	0	0	0	1	0	1	.125	0	2	0	1.000
Dickson, p	2	5	1	2	2	0	0	1	0	1	.400	0	3	0	1.000
Munger, p	1	4	0	1	0	0	0	0	0	2	.250	1	0	0	1.000
Beazley, p	1	0	0	0	0	0	0	0	0	0	.000	0	1	0	1.000
Wilks, p	1	0	0	0	0	0	0	0	0	0	.000	0	1	0	1.000
Brazley, p	1	2	0	0	0	0	0	0	0	0	.000	0	1	0	1.000
*Sisler	2	2	0	0	0	0	0	0	0	0	.000	0	0	0	.000
*Jones	1	1	0	0	0	0	0	0	0	1	.000	0	0	0	.000
Total		232	28	60	19	2	1	27	19	30	.259	186	68	4	.984

BOSTON AMERICANS

	g.	ab.	r.	h.	2b.	3b.	hr.	rbi.	bb.	so.	Bat. avg.	po.	a.	e.	Fldg. avg.
*McBride, rf	5	12	0	2	0	0	0	1	0	1	.167	4	0	1	.800
Moses, rf	4	12	1	5	0	0	0	0	1	2	.417	5	0	0	1.000
Pesky, ss	7	30	2	7	0	0	0	0	1	3	.233	13	16	4	.879
DiMaggio, cf	7	27	2	7	3	0	0	3	2	2	.259	19	3	0	1.000
Williams, lf	7	25	2	5	0	0	0	1	5	5	.200	16	2	0	1.000
York, 1b	7	23	6	6	1	1	2	5	6	4	.261	59	4	1	.984
Doerr, 2b	6	22	1	9	1	0	1	3	2	2	.409	18	31	0	1.000
Higgins, 3b	7	24	1	5	1	0	0	2	2	0	.208	6	6	2	.857
*Russell, 3b	2	2	1	2	0	0	0	0	0	0	1.000	0	0	0	.000
H. Wagner, c	5	13	0	0	0	0	0	0	0	1	.000	20	2	0	1.000
Partee, c	5	10	1	1	0	0	0	1	1	2	.100	14	1	0	1.000
Hughson, p	3	3	0	1	0	0	0	0	1	0	.333	0	1	1	.500
Bagby, p	1	1	0	0	0	0	0	0	0	0	.000	0	1	0	1.000
Harris, p	2	3	0	1	0	0	0	0	0	1	.333	0	2	0	1.000
Zuber, p	1	0	0	0	0	0	0	0	0	0	.000	0	0	0	.000
Ferriss, p	2	6	0	0	0	0	0	0	0	1	.000	0	3	0	1.000
Brown, p	1	0	0	0	0	0	0	0	0	0	.000	0	0	0	.000
Johnson, p	3	1	0	0	0	0	0	0	0	0	.000	1	0	0	1.000
Ryba, p	1	0	0	0	0	0	0	0	0	0	.000	0	0	1	.000
Dobson, p	3	3	0	0	0	0	0	0	0	2	.000	0	2	0	1.000
Dreiserwerd, p	1	0	0	0	0	0	0	0	0	0	.000	0	0	0	.000
Klinger, p	1	0	0	0	0	0	0	0	0	0	.000	1	0	0	1.000
†Gutteridge, 2b	2	5	1	2	0	0	0	1	0	0	.400	0	2	0	1.000
*Culberson, rf	5	9	1	2	0	0	1	1	1	2	.222	7	0	0	1.000
*Metkovich	2	2	1	1	1	0	0	0	0	0	.500	0	0	0	.000
†Campbell	1	0	0	0	0	0	0	0	0	0	.000	0	0	0	.000
Total		233	20	56	7	1	4	18	22	28	.240	183	76	10	.963

*Pinch-hitter. †Pinch-runner.

COMPOSITE SCORE BY INNINGS

St. Louis	0	5	7	0	5	1	1	3	6	0—28
Boston	5	2	0	1	0	1	4	5	1	1—20

THREE-GAME SERIES WINNERS

When Harry Brecheen of the Cardinals won three games from the Red Sox in the 1946 series, he became the ninth pitcher in the classic's history to perform that feat. The others were: Deacon Phillippe, 1903; Bill Dinneen, 1903; Christy Mathewson, 1905; Babe Adams, 1909; Jack Coombs, 1910; Joe Wood, 1912; Urban Faber, 1917, and Stanley Coavaleskie, 1920.

Composite Box Score—(cont.)

PITCHING SUMMARY

	g.	cg.	ip.	h.	r.	er.	bb.	so.	hb.	wp.	w.	l.	pct.	era.
erriss	2	1	13 ¹ / ₃	13	3	3	2	4	0	0	1	0	1.000	2.03
ohnson	3	0	3 ¹ / ₃	1	1	1	2	1	0	0	1	0	1.000	2.70
obson	3	1	12 ² / ₃	4	3	0	3	10	1	0	1	0	1.000	0.00
ughson	3	0	14 ¹ / ₃	14	8	5	3	8	1	0	0	1	.000	3.14
linger	1	0	² / ₃	2	1	1	1	0	0	0	0	1	.000	13.50
arris	2	0	9 ² / ₃	11	6	4	4	5	0	0	0	2	.000	3.72
agby	1	0	3	6	1	1	1	1	0	0	0	0	.000	3.00
iber	1	0	2	3	1	1	1	1	0	0	0	0	.000	4.50
rown	1	0	1	4	3	3	1	0	0	0	0	0	.000	27.00
yba	1	0	² / ₃	2	1	0	1	0	0	0	0	0	.000	0.00
reisewerd	1	0	¹ / ₃	0	0	0	0	0	0	0	0	0	.000	0.00
recheen	3	2	20	14	1	1	5	11	0	0	3	0	1.000	0.45
runger	1	1	9	9	3	1	3	2	0	0	1	0	1.000	1.00
ollet	2	1	10 ¹ / ₃	12	4	4	4	3	1	0	0	1	.000	3.48
ackson	2	0	14	11	6	6	4	7	0	0	0	1	.000	3.50
azle	1	0	6 ² / ₃	7	5	4	6	4	0	0	0	1	.000	5.40
ilks	1	0	1	2	1	0	0	0	0	0	0	0	.000	0.00
azley	1	0	1	1	0	0	0	1	0	1	0	0	.000	0.00

Earned runs—Boston 16, St. Louis 19. Sacrifices—Marion 3, Moore 2, Munger, Walker, Schoendienst, H. Wagner, Dobson, DiMaggio. Double plays—Marion and Musial; DiMaggio and Pesky; Pesky, Doerr and York; Slaughter and Garagiola; Doerr, Pesky and York; Schoendienst and Musial; Pesky and Doerr; Partee and Pesky; Marion, Schoendienst and Musial; Kurowski, Schoendienst and Musial 2; Brecheen, Schoendienst, Marion and Musial. Stolen bases—Schoendienst, Musial, Slaughter, Culberson, Pesky. Passed ball—Garagiola. Left on bases—Boston 53, St. Louis 50. Times of games—2:39, 1:56, 1:54, 2:31, 2:23, 1:56, 2:17. Umpires—Ballanfant (NL), Hubbard (AL), Barlick (NL), Berry (AL). Attendances—First game, 36,218; second game, 35,815; third game, 34,500; fourth game, 34,645; fifth game, 35,982; sixth game, 35,768; seventh game, 36,143. Receipts—First game, \$56,646; second game, \$155,372; third game, \$140,451; fourth game, \$143,886; fifth game, \$44,897; sixth game, \$155,269; seventh game, \$156,379.

World Series Club Standing

Series	Won	Lost	Pct.	Series	Won	Lost	Pct.
Boston (N)	1	1	.000	Pittsburgh (N)	4	2	.500
Cleveland (A)	1	1	.000	New York (N)	12	4	.833
Boston (A)	6	5	.545	Washington (A)	3	1	.750
New York (A)	14	10	.583	Detroit (A)	7	2	.778
St. Louis (N)	9	6	.600	Chicago (N)	10	2	.833
Cincinnati (N)	3	2	.600	Philadelphia (N)	1	0	1.000
Chicago (A)	3	2	.600	St. Louis (A)	1	0	1.000
Philadelphia (A)	8	5	.615	Brooklyn (N)	3	0	1.000

RECAPITULATION

	Won
American League	26
National League	17

Feller Sets Pitching Marks in 1946

Bobby Feller, the Cleveland Indians' speedball pitcher, capped his first full season back in action after serving in the U. S. Navy by breaking the major league record for strikeouts in a single season. Three days before the 1946 season ended Feller tied the mark of 343 strikeouts, made by Rube Waddell of the Philadelphia Athletics in 1904, and on the last day he fanned five Detroit batsmen to finish with a total of 348 strikeouts. Feller worked in 10 innings to achieve his record. In addition, Feller hurled a no-hit no-run game against the New York Yankees on April 30 and two one-hitters, to bring his lifetime total to two no-hitters and

eight one-hitters. This erased the record of two no-hitters and seven one-hitters held by Addie Joss, an old Cleveland pitcher.

Feller's 1946 strikeout record:

Opponent	Games	Strikeout
Chicago	9	66
Washington	7	59
New York	7	56
Boston	6	49
Philadelphia	6	41
St. Louis	7	40
Detroit	6	37
Totals	48	348

MAJOR LEAGUE RECORDS FOR 1946

National League

FINAL STANDING OF CLUBS

	St. Louis	Brooklyn	Boston	Philadelphia	Cincinnati	Pittsburgh	New York	Lost	Percentage	Games behind
*St. Louis.....	16	14	15	14	13	12	98	58	.628	
Brooklyn.....	8	11	17	14	14	15	96	60	.615	2
Chicago.....	8	11	9	12	13	12	7	82	.536	14½
Boston.....	7	5	12	14	15	15	13	81	.72	15½
Philadelphia.....	8	5	10	8	14	14	10	69	.85	.448 28
Cincinnati.....	8	8	9	7	8	13	14	67	.87	.435 30
Pittsburgh.....	9	8	10	7	8	9	12	63	.91	.409 34
New York.....	10	7	5	9	12	8	10	61	.93	.396 36
Lost.....	58	60	71	72	85	87	91	93		

*Won championship play-off from Brooklyn, 2 games to 0.

American League

FINAL STANDING OF CLUBS

	Boston	Detroit	Washington	New York	Chicago	Cleveland	St. Louis	Philadelphia	Won	Lost	Percentage	Games behind
Boston	15	14	16	13	15	14	17	104	50	.675		
Detroit	7	13	12	17	14	17	92	62	.597	12		
New York	8	9	14	12	14	16	87	67	.565	17		
Washington	6	10	8	12	15	9	16	76	.78	.494	28	
Chicago	9	10	8	10	13	12	12	74	.80	.481	30	
Cleveland	7	5	10	7	9	15	15	68	.86	.442	36	
St. Louis	8	8	13	10	7	12	66	.88	.429	38		
Philadelphia	5	5	6	6	10	7	10	49	.105	.318	55	
Lost	50	62	67	78	80	86	88	105				

THE LEADERS

National League

Batting—Stan Musial, St. Louis, .365.
 Runs—Stan Musial, St. Louis, 124.
 Runs batted in—Enos Slaughter, St. Louis, 130.

Hits—Stan Musial, St. Louis, 228.
 Doubles—Stan Musial, St. Louis, 49.
 Triples—Stan Musial, St. Louis, 20.
 Home runs—Ralph Kiner, Pittsburgh, 23.
 Stolen bases—Pete Reiser, Brooklyn, 35.
 Pitching—Schoolboy Rowe, Philadelphia, W11, L4, .733.

American League

Batting—Mickey Vernon, Washington, .353.
 Runs—Ted Williams, Boston, 142.
 Runs batted in—Hank Greenberg, Detroit, 126.

Hits—Johnny Pesky, Boston, 208.
 Doubles—Stan Spence, Washington, 49.
 Triples—Hank Edwards, Cleveland, 16.
 Home runs—Hank Greenberg, Detroit, 44.
 Stolen bases—George Case, Cleveland, 29.
 Pitching—Dave Ferriss, Boston, W25, L6, .806.

Unofficial Averages

INDIVIDUAL BATTING

Player and Club	g.	ab.	r.	h.	rbi.	pet.
Musial, St. Louis.....	156	624	124	228	103	.365
Mize, New York.....	101	377	70	127	70	.337
Hopp, Boston.....	129	443	73	148	45	.334
Walker, Brooklyn.....	150	576	80	184	116	.319
Ennis, Phila.....	141	540	69	169	72	.313
Medwick, Brooklyn.....	41	77	7	24	19	.312
Galan, Brooklyn.....	99	275	53	85	39	.309
Holmes, Boston.....	152	569	81	176	79	.309
Dinges, Philadelphia.....	50	104	4	32	11	.308
Lopez, Pittsburgh.....	56	150	13	46	10	.307
Kurowski, St. L.....	141	519	75	157	89	.303
Waitkus, Chicago.....	113	442	50	134	53	.303
Slaughter, St. Louis.....	156	609	100	183	130	.300
Herman, Bklyn-Bos.....	123	435	59	130	52	.299
Sturgeon, Chicago.....	100	294	27	87	21	.296
Cavarretta, Chicago.....	139	510	88	150	81	.294
Salkeld, Pittsburgh.....	69	160	18	47	21	.294
Gordon, New York.....	135	449	65	131	45	.292
Zientara, Cincinnati.....	78	281	26	82	14	.292
Cox, Pittsburgh.....	120	407	31	118	34	.290
Lombardi, New York.....	87	238	19	69	38	.290
McCullough, Chicago.....	85	306	38	88	35	.288
Reese, Brooklyn.....	151	542	78	155	59	.286
Litwhiler, St. L.-Bos.....	85	252	28	72	39	.286
Hack, Chicago.....	92	323	56	92	28	.285
McCormick, Phila.....	134	503	46	143	67	.284
Schoendienst, St. L.....	141	606	92	171	33	.282

INDIVIDUAL BATTING

Player and Club	g.	ab.	r.	h.	rbi.	pet.
Vernon, Washington.....	148	587	90	207	83	.353
Cullenbine, Detroit.....	111	321	64	110	55	.343
Williams, Boston.....	150	514	142	176	123	.342
Pesky, Boston.....	153	621	115	208	54	.335
Kell, Phila.-Det.....	131	520	69	168	52	.323
DiMaggio, Boston.....	142	534	85	169	73	.317
Culberson, Boston.....	59	180	35	57	18	.317
McCosky, Det.-Phila.....	116	402	45	127	45	.316
Pardee, Boston.....	40	111	12	35	9	.315
Appling, Chicago.....	149	582	60	180	54	.309
Stephens, St. Louis.....	115	450	67	138	67	.307
Valo, Philadelphia.....	108	348	59	106	29	.305
Souchock, New York.....	47	86	15	26	8	.302
Edwards, Cleveland.....	124	458	63	138	53	.301
Robinson, New York.....	100	330	32	99	63	.300
Cramer, Detroit.....	68	204	26	60	27	.294
Spence, Washington.....	153	579	82	169	86	.292
McBride, Boston.....	62	154	21	45	19	.292
Boudreau, Cleveland.....	140	515	52	150	60	.291
Lewis, Washington.....	149	583	82	169	45	.290
DiMaggio, New York.....	132	503	81	146	94	.290
Tucker, Chicago.....	120	438	63	126	36	.288
Crossetti, New York.....	28	59	4	17	3	.288
Kolloway, Chicago.....	122	477	45	135	51	.283
Suder, Philadelphia.....	128	454	38	128	47	.282
Dillinger, St. Louis.....	82	224	33	63	10	.281
Rosar, Philadelphia.....	121	425	34	119	48	.280

National League—(cont.)

Individual Batting—(cont.)

Player and Club	g.	ab.	r.	h.	rbi.	pet.
Arillo, Brooklyn.....	116	333	30	94	32	.282
osen, Bklyn.-N. Y.....	103	315	38	89	31	.282
owell, Boston.....	95	294	47	83	30	.282
afko, Chicago.....	65	234	18	66	38	.282
Marshall, New York.....	131	510	62	142	46	.279
aiser, Brooklyn.....	122	423	76	118	72	.279
ung, New York.....	104	290	29	81	33	.279
Wrosteck, Phila.....	145	547	73	152	47	.278
essell, Pittsburgh.....	145	512	69	142	50	.278
anky, Brooklyn.....	144	482	99	132	37	.274
erban, St. L.-Phila.....	136	475	44	130	33	.274
minick, Phila.....	124	407	56	111	51	.273
ce, St. Louis.....	55	139	10	38	13	.273
ultz, N. Y.-St. L.....	57	144	8	39	15	.271
utton, Cincinnati.....	116	436	56	118	68	.271
bor, Philadelphia.....	123	461	53	124	51	.269
asi, Boston.....	133	396	53	106	60	.268
oper, New York.....	87	280	39	75	46	.268
wards, Brooklyn.....	92	292	24	78	26	.267
riott, Pittsburgh.....	138	483	51	128	68	.265
cker, New York.....	95	197	28	52	12	.264
tek, New York.....	82	284	32	75	29	.264
ore, St. Louis.....	91	278	34	73	28	.263
as, Cincinnati.....	140	534	56	140	51	.262
stine, Pittsburgh.....	130	491	60	128	52	.261
ckert, Chicago.....	114	395	43	103	49	.261
nitman, Brooklyn.....	104	265	39	69	31	.260
ller, Boston.....	133	473	71	123	33	.260
aler, St. Louis.....	83	235	18	61	43	.260
etcher, Pittsburgh.....	146	524	71	134	62	.256
wrey, Chicago.....	144	540	75	138	53	.256
tanner, New York.....	126	420	63	107	49	.255
rnandez, Boston.....	115	372	37	95	42	.255
eller, Cincinnati.....	114	377	35	96	45	.255
erson, Brooklyn.....	79	200	19	51	12	.255
onfriddo, Pittsburgh.....	64	102	11	26	9	.255
ultz, Brooklyn.....	90	252	26	63	26	.252
rt, New York.....	145	497	50	125	40	.252
oke, Cincinnati.....	124	432	33	109	44	.252
rthey, Philadelphia.....	128	433	55	109	62	.251
kon, Cincinnati.....	101	311	29	78	34	.251
Cormick, Cin.-Bos.....	82	238	43	59	22	.248
rbitt, Cincinnati.....	82	275	25	68	17	.247
iner, Pittsburgh.....	143	499	63	123	83	.246
ey, Cincinnati.....	111	334	46	82	24	.246
eams, Cincinnati.....	94	309	35	76	23	.246
nnson, Chicago.....	83	314	37	77	18	.245
nnano, Cin.....	83	233	16	57	29	.245
Hughes, Phila.....	89	275	23	67	23	.244
ringer, Chicago.....	80	209	26	51	19	.244
evers, Brooklyn.....	102	306	33	74	61	.242
gney, New York.....	109	357	40	86	31	.241
own, Pittsburgh.....	79	241	23	58	13	.241
an, Boston.....	143	502	56	120	46	.239
ndley, Pittsburgh.....	115	411	42	98	27	.238
lker, St. Louis.....	111	346	53	82	28	.237
ragiola, St. Louis.....	74	211	22	50	21	.237
nders, Boston.....	79	253	42	60	25	.237
avagetto, Brooklyn.....	88	242	36	57	27	.236
bert, Chi.-Phila.....	103	274	36	64	19	.234
erion, St. Louis.....	147	498	51	116	45	.233
sak, St. Louis.....	100	275	39	64	42	.233
wsome, Phila.....	112	375	35	87	22	.232
y, Cincinnati.....	121	434	52	100	22	.230
enwater, Boston.....	99	224	30	51	14	.228
lesandro, Chicago.....	65	89	4	20	10	.225
eholson, Chicago.....	103	291	36	65	44	.224
ges, Chicago.....	82	221	26	49	16	.222
ham, Bklyn.-N. Y.....	102	275	34	60	48	.218
ams, St. Louis.....	81	173	20	32	21	.185

American League—(cont.)

Individual Batting—(cont.)

Player and Club	g.	ab.	r.	h.	rbi.	pet.
Fleming, Cleveland.....	99	307	38	86	42	.280
Heath, Wash.-St. L.....	134	482	70	134	84	.278
Grace, St. L.-Wash.....	125	482	60	134	43	.278
Wright, Chicago.....	115	422	46	117	51	.277
Keller, New York.....	150	539	98	149	101	.276
York, Boston.....	154	579	78	159	119	.275
Greenberg, Detroit.....	142	523	90	144	126	.275
Doerr, Boston.....	151	583	94	158	117	.271
Wakefield, Detroit.....	110	394	64	106	59	.269
Ross, Cleveland.....	55	153	12	41	14	.268
Evers, Detroit.....	81	303	42	81	33	.267
Berardino, St. Louis.....	144	582	70	155	68	.266
Judnich, St. Louis.....	142	512	70	135	73	.264
Outlaw, Detroit.....	94	297	36	78	30	.263
Hig'ns, Det.-Boston.....	82	260	20	68	36	.262
Laabs, St. Louis.....	79	263	40	69	51	.262
Mackiewicz, Cleve.....	77	257	35	67	15	.261
Dickey, New York.....	54	134	10	35	10	.261
Chapman, Phila.....	146	545	77	142	67	.260
Johnson, New York.....	85	296	51	77	35	.260
Kuhel, Wash.-Chicago.....	78	258	26	67	22	.260
Zarilla, St. Louis.....	125	371	35	96	43	.259
Lindell, New York.....	102	332	41	86	40	.259
Michaels, Chicago.....	91	291	36	75	22	.258
Kennedy, Chicago.....	113	412	43	106	34	.257
Evans, Washington.....	87	268	31	69	29	.257
Rizzuto, New York.....	126	471	53	120	39	.255
Priddy, Washington.....	138	511	51	130	58	.254
Torres, Washington.....	62	185	19	47	13	.254
Christman, St. Louis.....	128	458	40	116	41	.253
Guerra, Washington.....	41	83	3	21	4	.253
Lake, Detroit.....	155	591	109	149	31	.252
Hodgin, Chicago.....	87	258	32	65	25	.252
Platt, Chicago.....	84	246	29	62	31	.252
Grimes, N. Y.-Phila.....	73	230	29	58	25	.252
Stirnweis, New York.....	129	487	75	122	35	.251
Handley, Philadelphia.....	89	251	31	63	21	.251
Trosky, Chicago.....	88	299	22	75	30	.251
Travis, Washington.....	137	464	45	116	56	.250
Bloodworth, Detroit.....	76	249	25	62	36	.249
Stevens, St. Louis.....	122	432	53	107	28	.248
Stainback, Phila.....	90	288	35	71	19	.247
Henrich, New York.....	150	576	92	141	82	.245
Majeski, N. Y.-Phila.....	87	276	26	67	55	.243
Lucadello, St. Louis.....	87	210	21	51	15	.243
Metkovich, Boston.....	86	280	42	68	24	.243
Tebbetts, Detroit.....	87	281	22	68	33	.242
Mancuso, St. Louis.....	86	260	21	63	23	.242
Keltner, Cleveland.....	116	399	47	96	45	.241
Mullin, Detroit.....	93	278	35	67	34	.241
Moses, Chi.-Boston.....	104	343	42	82	33	.239
Hayes, Cleve.-Chicago.....	104	333	26	79	34	.237
Hegan, Cleveland.....	88	272	29	64	18	.235
Meyer, Cleveland.....	72	206	13	48	15	.233
Etten, New York.....	108	324	38	75	49	.231
Case, Cleveland.....	118	484	45	109	21	.225
Seerey, Cleveland.....	117	404	57	91	63	.225
H. Wagner, Boston.....	116	378	39	85	49	.225
Conway, Cleveland.....	68	259	26	58	18	.224
McQuinn, Phila.....	136	493	46	109	35	.221
Desautels, Phila.....	52	130	10	28	13	.215
Tresh, Chicago.....	80	217	28	46	20	.212
Derry, Philadelphia.....	68	180	17	38	13	.211
Gordon, New York.....	112	376	35	79	48	.210
Webb, Detroit.....	64	167	10	35	16	.210
Russell, Boston.....	80	274	22	57	35	.208
Hitchcock, Det.-W.....	101	356	27	73	25	.205
Robertson, Wash.....	73	229	29	45	18	.197
Binks, Washington.....	71	133	14	26	12	.196
Wallaesa, Philadelphia.....	63	194	16	38	13	.196

National League—(cont.)

CLUB BATTING

	g.	r.	h.	hr.	rbi.	sb.	pct.
St. Louis.....	156	717	1426	81	661	54	.265
Boston.....	154	633	1377	43	592	60	.264
Brooklyn.....	157	701	1376	54	649	106	.261
Philadelphia.....	155	561	1351	80	519	40	.258
New York.....	154	612	1327	121	574	46	.255
Chicago.....	155	628	1345	54	570	44	.254
Pittsburgh.....	155	552	1301	60	501	46	.250
Cincinnati.....	156	523	1261	65	478	77	.239

CLUB FIELDING

	po.	a.	e.	dp.	pct.
St. Louis.....	4194	1774	127	166	.979
Chicago.....	4219	1769	144	117	.977
Cincinnati.....	4249	1912	159	194	.975
Philadelphia.....	4104	1697	146	144	.975
New York.....	4048	1755	163	119	.973
Boston.....	4118	1652	164	133	.972
Brooklyn.....	4205	1736	171	155	.972
Pittsburgh.....	4115	1813	183	126	.970

PITCHING RECORDS

	g.	ip.	h.	bb.	so.	w.	l.	pct.
Wilks, St. Louis.....	39	95	87	38	41	8	0	1.000
Lanier, St. Louis.....	6	56	45	19	36	6	0	1.000
Kush, Chicago.....	40	131	115	43	52	9	2	.818
Herring, Brooklyn.....	35	86	92	29	33	7	2	.778
Branca, Brooklyn.....	24	65	61	34	39	3	1	.750
Rowe, Philadelphia.....	17	137	112	27	49	11	4	.733
Dickson, St. Louis.....	47	184	155	55	81	15	6	.714
Behrman, Brooklyn.....	47	151	137	68	78	11	5	.688
Casey, Brooklyn.....	46	100	101	33	31	11	5	.688
Higbe, Brooklyn.....	42	211	189	108	135	17	8	.680
Pollet, St. Louis.....	40	266	228	87	114	21	10	.677
Melton, Brooklyn.....	24	100	74	53	43	6	3	.667
Burkhart, St. Louis.....	25	100	111	33	32	6	3	.667
Spahn, Boston.....	24	125	107	36	67	8	5	.615
Mauney, Phila.....	24	89	97	18	29	6	4	.600
Gregg, Brooklyn.....	26	117	103	44	56	6	4	.600
Barrett, St. Louis.....	23	67	75	24	19	3	2	.600
Head, Brooklyn.....	13	56	56	24	17	3	2	.600
Mulligan, Phila.-Bos.....	23	70	69	36	21	3	2	.600
Sain, Boston.....	37	265	225	87	126	20	14	.588
Walters, Cincinnati.....	22	152	147	62	58	10	7	.588
Beazley, St. Louis.....	19	103	109	53	36	7	5	.583
Wright, Boston.....	36	175	163	71	39	12	9	.571
Bahr, Pittsburgh.....	27	137	123	51	43	8	6	.571
Jurisch, Philadelphia.....	13	68	72	32	29	4	3	.571
Lombardi, Brooklyn.....	41	193	170	83	57	13	10	.565
Ostermueller, Pitts.....	27	193	192	56	54	13	10	.565
Erickson, Chicago.....	32	136	120	63	74	9	7	.563
Hatten, Brooklyn.....	42	222	217	107	82	14	11	.560
Beggs, Cincinnati.....	28	190	175	37	38	12	10	.545
Borowy, Chicago.....	32	202	220	60	93	12	10	.545
Bithorn, Chicago.....	26	87	97	25	34	6	5	.545
Chipman, Chicago.....	34	117	111	54	35	6	5	.545
Johnson, Phila.-Bos.....	29	130	141	35	41	6	5	.545
Cooper, Boston.....	28	201	187	38	89	13	11	.542
Wyse, Chicago.....	40	202	210	52	54	14	12	.538
Passeau, Chicago.....	21	130	118	42	47	9	8	.529
Lee, Boston.....	25	140	148	49	32	10	9	.526
Brazle, St. Louis.....	37	154	152	55	59	11	10	.524
Schmitz, Chicago.....	41	223	184	94	135	11	11	.500
Brecheen, St. Louis.....	36	231	212	67	113	15	15	.500
Schanz, Philadelphia.....	35	116	130	69	46	6	6	.500
Hetki, Cincinnati.....	31	124	118	31	37	6	6	.500
Schumacher, N. Y.....	24	97	96	51	48	4	4	.500
Wallace, Boston.....	27	74	75	30	27	3	3	.500
Judd, Philadelphia.....	30	174	170	90	64	11	12	.478

American League—(cont.)

CLUB BATTING

	g.	r.	h.	hr.	rbi.	sb.	pct.
Boston.....	156	792	1447	106	725	41	.272
Washington.....	155	609	1388	59	546	47	.260
Detroit.....	155	704	1372	108	643	68	.259
Chicago.....	155	564	1362	37	510	77	.256
Philadelphia.....	155	529	1317	40	479	56	.253
St. Louis.....	156	621	1346	84	575	20	.251
New York.....	154	694	1267	136	647	48	.247
Cleveland.....	156	537	1285	79	489	56	.245

CLUB FIELDING

	po.	a.	e.	dp.	pct.
Boston.....	4156	1751	137	164	.977
Cleveland.....	4132	1687	144	143	.976
Detroit.....	4206	1687	154	134	.975
New York.....	4087	1765	150	174	.975
St. Louis.....	4148	1712	156	153	.974
Chicago.....	4154	1969	171	173	.973
Philadelphia.....	3969	1567	161	140	.972
Washington.....	4179	1756	204	165	.967

PITCHING RECORDS

	g.	ip.	h.	bb.	so.	w.	l.	pct.
Ruffing, N. Y.....	8	61	37	23	19	5	1	.833
Ferriss, Boston.....	40	274	273	73	107	25	6	.806
Dreisewerd, Boston.....	20	48	49	15	19	4	1	.800
Ferrick, Cleve.-St. L.....	34	50	51	8	21	4	1	.800
Gumpert, N. Y.....	33	133	114	33	65	11	3	.786
Caldwell, Chicago.....	39	91	60	29	42	13	4	.765
Newhouser, Detroit.....	37	246	215	98	273	26	9	.747
Chandler, New York.....	34	257	198	88	135	20	8	.714
Zuber, N. Y.-Bos.....	18	62	47	40	29	5	2	.714
Fannin, St. Louis.....	27	87	76	42	52	5	2	.714
Murphy, New York.....	27	45	40	18	19	4	2	.667
Harris, Boston.....	34	223	236	77	132	17	9	.654
Dobson, Boston.....	32	167	149	67	91	13	7	.650
Hughson, Boston.....	39	280	252	62	155	20	11	.645
Feller, Cleveland.....	48	307	277	152	348	26	15	.634
Wynn, Washington.....	17	107	112	32	35	8	5	.615
Benton, Detroit.....	28	141	132	59	56	11	7	.611
Trucks, Detroit.....	32	237	217	72	161	14	9	.609
Hollingsworth, St. L.-Chi.....	26	67	86	26	24	3	2	.600
Ngigelling, Washington.....	8	38	39	21	10	3	2	.600
Klinger, Boston.....	28	57	49	25	15	3	2	.600
Papish, Chicago.....	31	138	122	61	61	7	5	.583
Trout, Detroit.....	38	277	244	96	153	17	13	.583
Flores, Philadelphia.....	29	155	147	38	46	9	7	.563
Haefner, Wash.....	33	228	219	81	82	14	11	.560
Hutchinson, Detroit.....	28	207	184	66	134	14	11	.560
Johnson, Boston.....	28	79	77	35	35	5	4	.556
Harder, Cleveland.....	13	92	85	35	19	5	4	.556
Bevens, N. Y.....	31	250	214	78	120	16	13	.552
Kramer, St. Louis.....	31	195	190	66	69	13	11	.542
Bagby, Boston.....	21	107	117	47	17	7	6	.538
Page, New York.....	31	136	126	72	76	9	8	.529
Newsom, Phila.-Wash.....	34	237	224	90	111	14	13	.519
Lopat, Chicago.....	29	230	216	47	89	13	13	.500
Leonard, Washington.....	26	162	183	36	61	10	10	.500
Rigney, Chicago.....	15	83	76	34	45	5	5	.500
Kinder, St. Louis.....	33	85	78	35	53	3	3	.500
Dietrich, Chicago.....	11	62	63	24	20	3	3	.500
Potter, St. Louis.....	23	145	152	59	70	8	9	.471
Gettel, New York.....	26	103	92	40	54	6	7	.462
Masterson, Wash.....	29	91	104	67	58	5	6	.455
Zoldak, St. Louis.....	35	170	166	57	45	9	11	.450
Marchildon, Phila.....	36	227	197	113	94	13	16	.448
Lemon, Cleveland.....	32	96	77	66	36	4	5	.444
Haynes, Chicago.....	32	177	203	60	59	7	9	.438
Marshall, N. Y.....	23	81	96	56	26	3	4	.429

National League Pennant Winners

Year	Club	Manager	Won	Lost	Pct.	Year	Club	Manager	Won	Lost	Pct.
1905	Chicago	Albert G. Spalding	52	14	.788	1912	New York	John J. McGraw	103	48	.682
1906	Boston	Harry Wright	31	17	.646	1913	New York	John J. McGraw	101	51	.664
1907	Boston	Harry Wright	41	19	.683	1914*	Boston	George T. Stallings	94	59	.614
1908	Providence	George Wright	59	25	.702	1915	Philadelphia	Patrick J. Moran	90	62	.592
1909	Chicago	Adrian C. Anson	67	17	.798	1916	Brooklyn	Wilbert Robinson	94	60	.610
1910	Chicago	Adrian C. Anson	56	28	.667	1917	New York	John J. McGraw	98	56	.636
1911	Chicago	Adrian C. Anson	55	29	.655	1918	Chicago	Fred L. Mitchell	84	45	.651
1912	Boston	John F. Morrill	63	35	.643	1919*	Cincinnati	Patrick J. Moran	96	44	.686
1913	Providence	Frank C. Bancroft	84	28	.750	1920	Brooklyn	Wilbert Robinson	93	61	.604
1914	Chicago	Adrian C. Anson	87	25	.777	1921*	New York	John J. McGraw	94	59	.614
1915	Chicago	Adrian C. Anson	90	34	.726	1922*	New York	John J. McGraw	93	61	.604
1916	Detroit	W. H. Watkins	79	45	.637	1923	New York	John J. McGraw	95	58	.621
1917	New York	James J. Mutrie	84	47	.641	1924	New York	John J. McGraw	93	60	.608
1918	New York	James J. Mutrie	83	43	.659	1925*	Pittsburgh	William B. McKechnie	95	58	.621
1919	Brooklyn	William H. McGunnigle	86	43	.667	1926*	St. Louis	Rogers Hornsby	89	65	.578
1920	Boston	Frank G. Selee	87	51	.630	1927	Pittsburgh	Owen J. Bush	94	60	.610
1921	Boston	Frank G. Selee	102	48	.680	1928	St. Louis	William B. McKechnie	95	59	.617
1922	Boston	Frank G. Selee	86	43	.667	1929	Chicago	Joseph V. McCarthy	98	54	.645
1923	Baltimore	Edward H. Hanlon	89	39	.695	1930	St. Louis	Charles E. Street	92	62	.597
1924	Baltimore	Edward H. Hanlon	87	43	.669	1931*	St. Louis	Charles E. Street	101	53	.656
1925	Baltimore	Edward H. Hanlon	90	39	.698	1932	Chicago	Charles J. Grimm	90	64	.584
1926	Boston	Frank G. Selee	93	39	.705	1933*	New York	William H. Terry	91	61	.599
1927	Boston	Frank G. Selee	102	47	.685	1934*	St. Louis	Frank F. Frisch	95	58	.621
1928	Brooklyn	Edward H. Hanlon	88	42	.677	1935	Chicago	Charles J. Grimm	100	54	.649
1929	Brooklyn	Edward H. Hanlon	82	54	.603	1936	New York	William H. Terry	92	62	.597
1930	Pittsburgh	Fred C. Clarke	90	49	.647	1937	New York	William H. Terry	95	57	.625
1931	Pittsburgh	Fred C. Clarke	103	36	.741	1938	Chicago	Charles L. Hartnett	89	63	.586
1932	Pittsburgh	Fred C. Clarke	91	49	.650	1939	Cincinnati	William B. McKechnie	97	57	.630
1933	New York	John J. McGraw	106	47	.693	1940*	Cincinnati	William B. McKechnie	100	53	.654
1934	New York	John J. McGraw	105	48	.686	1941	Brooklyn	Leo E. Durocher	100	54	.649
1935	Chicago	Frank L. Chance	116	36	.763	1942*	St. Louis	William H. Southworth	106	48	.688
1936	Chicago	Frank L. Chance	107	45	.704	1943	St. Louis	William H. Southworth	105	49	.682
1937	Chicago	Frank L. Chance	99	55	.643	1944*	St. Louis	William H. Southworth	105	49	.682
1938	Pittsburgh	Fred C. Clarke	110	42	.724	1945	Chicago	Charles J. Grimm	98	56	.636
1939	Chicago	Frank L. Chance	104	50	.675	1946*	St. Louis	Eddie Dyer	98	58	.628
1940	New York	John J. McGraw	99	54	.647						

World Series winner.

American League Pennant Winners

Year	Club	Manager	Won	Lost	Pct.	Year	Club	Manager	Won	Lost	Pct.
1901	Chicago	Clark C. Griffith	83	53	.610	1924*	Washington	Stanley R. Harris	92	62	.597
1902	Philadelphia	Connie Mack	83	53	.610	1925	Washington	Stanley R. Harris	96	55	.636
1903	Boston	James J. Collins	91	47	.659	1926	New York	Miller J. Huggins	91	63	.591
1904	Boston	James J. Collins	95	59	.617	1927*	New York	Miller J. Huggins	110	44	.714
1905	Philadelphia	Connie Mack	92	56	.622	1928*	New York	Miller J. Huggins	101	53	.656
1906	Chicago	Fielder A. Jones	93	58	.616	1929*	Philadelphia	Connie Mack	104	46	.693
1907	Detroit	Hugh A. Jennings	92	58	.613	1930*	Philadelphia	Connie Mack	102	52	.662
1908	Detroit	Hugh A. Jennings	90	63	.588	1931	Philadelphia	Connie Mack	107	45	.704
1909	Detroit	Hugh A. Jennings	98	54	.645	1932*	New York	Joseph V. McCarthy	107	47	.695
1910*	Philadelphia	Connie Mack	102	48	.680	1933	Washington	Joseph E. Cronin	99	53	.651
1911*	Philadelphia	Connie Mack	101	50	.669	1934	Detroit	Gordon S. Cochrane	101	53	.656
1912*	Boston	J. Garland Stahl	105	47	.691	1935*	Detroit	Gordon S. Cochrane	93	58	.616
1913*	Philadelphia	Connie Mack	96	57	.627	1936*	New York	Joseph V. McCarthy	102	51	.667
1914*	Philadelphia	Connie Mack	99	53	.651	1937*	New York	Joseph V. McCarthy	102	52	.662
1915*	Boston	William F. Carrigan	101	50	.669	1938*	New York	Joseph V. McCarthy	99	53	.651
1916*	Boston	William F. Carrigan	91	63	.591	1939*	New York	Joseph V. McCarthy	106	45	.702
1917*	Chicago	Clarence H. Rowland	100	54	.649	1940	Detroit	Delmar D. Baker	90	64	.584
1918*	Boston	Edward G. Barrow	75	51	.595	1941*	New York	Joseph V. McCarthy	101	53	.656
1919	Chicago	William Gleason	88	52	.629	1942	New York	Joseph V. McCarthy	103	51	.669
1920*	Cleveland	Tris E. Speaker	98	56	.636	1943*	New York	Joseph V. McCarthy	98	56	.636
1921	New York	Miller J. Huggins	98	55	.641	1944	St. Louis	James L. Sewell	89	65	.578
1922	New York	Miller J. Huggins	94	60	.610	1945*	Detroit	Stephen F. O'Neill	88	65	.575
1923*	New York	Miller J. Huggins	98	54	.645	1946	Boston	Joseph E. Cronin	104	50	.675

World Series winner.

Toney—Vaughn Pitching Duel

On May 2, 1917, Fred Toney of the Reds and Jim Vaughn of the Cubs pitched a double no-hit no-run game for nine innings. In the tenth Vaughn allowed two hits,

which, coupled with an error, won for the Reds, 1-0, as Toney carried his hitless pitching through the last half of the inning.

National League Batting Champions

(Based on minimum of 100 games played.)

Year	Pct.	Year	Pct.	Year	Pct.
1876—R. Barnes, Chi.	403	1899—E. J. Delahanty, Phila.	408	1923—Rogers Hornsby, St. L.	384
1877—J. L. White, Bos.	385	1900—J. P. Wagner, Pitts.	380	1924—Rogers Hornsby, St. L.	424
1878—A. Dalrymple, Mil.	356	1901—J. Burkett, St. L.	382	1925—Rogers Hornsby, St. L.	403
1879—A. C. Anson, Chi.	407	1902—C. H. Beaumont, Pitts.	357	1926—Eugene Harrgrave, Cin.	353
1880—G. F. Gore, Chi.	365	1903—J. P. Wagner, Pitts.	355	1927—Paul G. Waner, Pitts.	389
1881—A. C. Anson, Chi.	399	1904—J. P. Wagner, Pitts.	349	1928—Rogers Hornsby, Bos.	398
1882—D. Brouthers, Buf.	367	1905—J. B. Seymour, Cin.	377	1929—Frank J. O'Doul, Phila.	398
1883—D. Brouthers, Buf.	371	1906—J. P. Wagner, Pitts.	339	1930—Wm. H. Terry, N. Y.	401
1884—J. O'Rourke, Buf.	350	1907—J. P. Wagner, Pitts.	350	1931—C. J. Hefey, St. L.	345
1885—R. Connor, N. Y.	371	1908—J. P. Wagner, Pitts.	354	1932—F. J. O'Doul, Bklyn.	368
1886—M. J. Kelly, Chi.	388	1909—J. P. Wagner, Pitts.	339	1933—C. H. Klein, Phila.	368
1887—A. C. Anson, Chi.	421	1910—S. N. Magee, Phila.	331	1934—P. G. Waner, Pitts.	362
1888—A. C. Anson, Chi.	343	1911—J. P. Wagner, Pitts.	334	1935—F. Vaughan, Pitts.	385
1889—D. Brouthers, Bos.	373	1912—H. Zimmerman, Chi.	372	1936—P. G. Waner, Pitts.	373
1890—J. Glasscock, N. Y.	336	1913—J. Daubert, Bklyn.	350	1937—J. M. Medwick, St. L.	374
1891—W. Hamilton, Phila.	338	1914—J. Daubert, Bklyn.	329	1938—E. N. Lombardi, Cin.	342
1892—C. Childs, Cleve.	335	1915—L. Doyle, N. Y.	320	1939—J. R. Mize, St. L.	345
1892—D. Brouthers, Bklyn.	335	1916—H. Chase, Cin.	339	1940—D. Garmis, Pitts.	355
1893—Hugh Duffy, Bos.	378	1917—E. J. Roush, Cin.	341	1941—H. P. Reiser, Bklyn.	343
1894—Hugh Duffy, Bos.	438	1918—Z. D. Wheat, Bklyn.	335	1942—E. N. Lombardi, Bos.	330
1895—J. Burkett, Cleve.	423	1919—E. J. Roush, Cin.	321	1943—S. F. Musial, St. L.	351
1896—J. Burkett, Cleve.	410	1920—Rogers Hornsby, St. L.	370	1944—F. Walker, Bklyn.	357
1897—W. Keeler, Balt.	432	1921—Rogers Hornsby, St. L.	397	1945—P. J. Cavarretta, Chicago.	359
1898—W. Keeler, Balt.	379	1922—Rogers Hornsby, St. L.	401	1946—S. F. Musial, St. L.	365

American League Batting Champions

(Based on minimum of 100 games played.)

Year	Pct.	Year	Pct.	Year	Pct.
1900—S. M. Dungan, K. C.	337	1916—T. Speaker, Cleve.	386	1932—D. Alexander, Det.-Bos.	361
1901—N. Lajoie, Phila.	405	1917—T. R. Cobb, Det.	383	1933—J. E. Fox, Phila.	350
1902—E. J. Delahanty, Wash.	376	1918—T. R. Cobb, Det.	382	1934—H. L. Gehrig, N. Y.	361
1903—N. Lajoie, Cleve.	355	1919—T. R. Cobb, Det.	384	1935—C. S. Myer, Wash.	341
1904—N. Lajoie, Cleve.	381	1920—G. H. Sisler, St. L.	407	1936—L. B. Appling, Chi.	389
1905—Elmer Flick, Cleve.	306	1921—H. E. Heilmann, Det.	394	1937—C. L. Gehring, Det.	371
1906—G. Stone, St. L.	358	1922—G. H. Sisler, St. L.	420	1938—J. E. Fox, Bos.	349
1907—T. R. Cobb, Det.	350	1923—H. E. Heilmann, Det.	403	1939—J. P. DiMaggio, N. Y.	381
1908—T. R. Cobb, Det.	324	1924—G. H. Ruth, N. Y.	378	1940—J. P. DiMaggio, N. Y.	351
1909—T. R. Cobb, Det.	377	1925—H. E. Heilmann, Det.	393	1941—T. S. Williams, Bos.	400
1910—T. R. Cobb, Det.	385	1926—H. E. Manush, Det.	378	1942—T. S. Williams, Bos.	350
1911—T. R. Cobb, Det.	420	1927—H. E. Heilmann, Det.	398	1943—L. B. Appling, Chi.	321
1912—T. R. Cobb, Det.	410	1928—L. A. Goslin, Wash.	379	1944—L. Boudreau, Cleve.	321
1913—T. R. Cobb, Det.	390	1929—L. A. Fonseca, Cleve.	369	1945—G. H. Stirnweiss, N. Y.	303
1914—T. R. Cobb, Det.	368	1930—A. H. Simmons, Phila.	381	1946—J. B. Vernon, Wash.	351
1915—T. R. Cobb, Det.	369	1931—A. H. Simmons, Phila.	390		

Two No-Hit Games in Majors in 1946

Ed Head of the Brooklyn Dodgers and Bobby Feller of the Cleveland Indians were the only pitchers in both major leagues to hurl no-hit no-run games during the 1946 season. Head's performance was against the Boston Braves on April 23, while Feller turned the trick against the New York Yankees one week later.

Kerr, Giants, Sets Fielding Mark

Buddy Kerr of the New York Giants set a major league fielding record for shortstops by completing 52 games in succession without an error in 1946. Kerr handled 275 chances faultlessly. Leo Durocher, playing with the Cincinnati Reds in 1931, set the previous mark of 51 errorless games, but he handled only 231 chances during his skein.

Giants' Great Winning Streak

The New York Giants, then managed by the late John McGraw, had two remarkable winning streaks in 1916, the first consisting of 17 victories in succession in the early part of the season and the second covering 26 games in a row at the tail end of the campaign. The first streak was oddly enough, made completely on the road, while the second skein was made at home. During the 26-game procession, still the major league record, the Giants swept seven double-headers. Actually the Giants played 27 games from September 7 to 30, but a 1-1 eight-inning tie with Pittsburgh in the second game of a twin bill played between the twelfth and thirteenth victories interrupted the record, but did not count against it. Despite their record, the Giants finished fourth, Brooklyn winning the pennant.

Major League Individual All-Time Records

Best batting percentage, season—Hugh
 Duffy, Boston (N), 1894 483
 Best batting percentage (10 or more
 years)—Ty Cobb, Detroit and Philadel-
 phia (A), 1905-28 367
 Best years batting .300 or better—Ty Cobb
 23
 Best hits—Ty Cobb 4,191
 Best hits, season—George Sisler, St. Louis
 (A), 1920 257
 Best consecutive hits, game—Wilbert Rob-
 ertson, Baltimore (N), 1892 7
 Best hits in succession—Frank Higgins,
 Boston (A), 1938 12
 Best consecutive games batted safely—Joe
 Maggio, New York (A), May 15 to July
 3, 1941 56
 Best long hits—Babe Ruth, Boston and
 New York (A), Boston (N), 1914-35
 506 2b, 136 3b, 714 home runs) .. 1,356
 Best total bases—Ty Cobb 5,863
 Best total bases, season—Babe Ruth, New
 York (A), 1921 457
 Best total bases, game—Bobby Lowe, Bos-
 ton (N), 1894; Ed Delahanty, Philadel-
 phia (N), 1896 (both hit 4 home runs,
 single) 17
 Best home runs—Babe Ruth 714
 Best home runs, season—Babe Ruth, New
 York (A), 1927 60

Most home runs, single game—Bobby
 Lowe, Boston (N), 1894; Ed Delahanty,
 Philadelphia (N), 1896; Lou Gehrig,
 New York (A), 1932; Chuck Klein, Phila-
 delphia (N), 1936 (10 innings) 4
 Most runs—Ty Cobb 2,244
 Most runs batted in—Babe Ruth ... 2,209
 Most runs batted in, season—Hack Wilson,
 Chicago (N), 1930 190
 Most games played—Ty Cobb 3,033
 Most consecutive games played—Lou Geh-
 rig, New York (A), June 1, 1925 to May
 2, 1939 2,130
 Longest service as player—Eddie Collins,
 Philadelphia and Chicago (A), 1906-30;
 Bobby Wallace, Cleveland (N) and St.
 Louis (A), 1894-1918 25 years
 Most times at bat—Ty Cobb 11,429
 Most bases on balls, season—Babe Ruth,
 1923 170
 Most bases on balls, game (modern record)
 —Jimmy Foxx, Boston (A), 1938 6
 Most stolen bases—Ty Cobb 892
 Most stolen bases, season (modern record)
 —Ty Cobb, Detroit (A), 1915 96
 Fewest strikeouts, season (150 or more
 games)—Joe Sewell, Cleveland (A), 1925,
 1929 4

PITCHING

Best games—Cy Young (472 in National
 League, 402 in American League), 1890-
 1911 874
 Best games won—Cy Young, Cleveland
 (N), 1890-98; St. Louis (N), 1899-1900;
 Boston (A), 1901-08; Cleveland (A),
 1909-11 (part); Boston (N), 1911 (part)
 511
 Best complete games, season—Jack Ches-
 bro, New York (A), 1904 48
 Best games, season (modern record)—
 Ace Adams, New York (N), 1943 70
 Best innings, season—Ed Walsh, Chicago
 (A), 1908 464
 Best earned-run average, season—Ferdie
 Schupp, New York (N), 1916 0.90
 Best hits in two consecutive games—
 John Vander Meer, Cincinnati (N), 1938
 (both no-hit games) 0

Most games won, season (modern record)
 —Jack Chesbro, New York (A), 1904 . 41
 Most consecutive games won, season—
 Tim Keefe, New York (N), 1888; Rube
 Marquard, New York (N), 1912 19
 Most shutout games—Walter Johnson,
 Washington (A), 1907-27 113
 Most shutout games, season—Grover Alex-
 ander, Philadelphia (N), 1916 16
 Most consecutive shutout innings—Walter
 Johnson, 1913 56
 Most strikeouts—Walter Johnson ... 3,497
 Most strikeouts in 9 innings (1901 to date)
 —Bobby Feller, Cleveland (A) vs. De-
 troit, Oct. 2, 1938 18
 Most strikeouts, season (modern record)
 —Bobby Feller, Cleveland (A), 1946
 348

Wambsganss and E. Smith Starred in 1920 World Series

World series history was made in the
 1st game of the 1920 Brooklyn-Cleveland
 series when Bill Wambsganss, Indian sec-
 ond baseman, executed an unassisted triple
 play and Elmer Smith, Cleveland out-

fielder, became the first player to hit a
 home run with the bases filled. Smith's feat
 was duplicated by Tony Lazzeri in the 1936
 event between the New York Yankees and
 the New York Giants.

National League Batting Champions

(Based on minimum of 100 games played.)

Year	Pct.	Year	Pct.	Year	Pct.
1876—R. Barnes, Chi.	403	1899—E. J. Delahanty, Phila	408	1923—Rogers Hornsby, St. L.	384
1877—J. L. White, Bos.	385	1900—J. P. Wagner, Pitts.	380	1924—Rogers Hornsby, St. L.	424
1878—A. Dalrymple, Mil.	356	1901—J. Burkett, St. L.	382	1925—Rogers Hornsby, St. L.	403
1879—A. C. Anson, Chi.	407	1902—C. H. Beaumont, Pitts.	357	1926—Eugene Hargrave, Cin.	353
1880—G. F. Gore, Chi.	365	1903—J. P. Wagner, Pitts.	355	1927—Paul G. Waner, Pitts.	349
1881—A. C. Anson, Chi.	399	1904—J. P. Wagner, Pitts.	349	1928—Rogers Hornsby, Bos.	387
1882—D. Brouthers, Buf.	367	1905—J. B. Seymour, Cin.	377	1929—Frank J. O'Doul, Phila.	398
1883—D. Brouthers, Buf.	371	1906—J. P. Wagner, Pitts.	339	1930—Wm. H. Terry, N. Y.	401
1884—J. O'Rourke, Buf.	350	1907—J. P. Wagner, Pitts.	350	1931—C. J. Hafey, St. L.	349
1885—R. Connor, N. Y.	371	1908—J. P. Wagner, Pitts.	354	1932—F. J. O'Doul, Bklyn.	368
1886—M. J. Kelly, Chi.	388	1909—J. P. Wagner, Pitts.	339	1933—C. H. Klein, Phila.	362
1887—A. C. Anson, Chi.	421	1910—S. N. Magee, Phila.	331	1934—P. G. Waner, Pitts.	362
1888—A. C. Anson, Chi.	343	1911—J. P. Wagner, Pitts.	334	1935—F. Vaughan, Pitts.	385
1889—D. Brouthers, Bos.	373	1912—H. Zimmermann, Chi.	372	1936—P. G. Waner, Pitts.	373
1890—J. Glasscock, N. Y.	336	1913—J. Daubert, Bklyn.	350	1937—J. M. Medwick, St. L.	374
1891—W. Hamilton, Phila.	338	1914—J. Daubert, Bklyn.	329	1938—E. N. Lombardi, Cin.	342
1892—C. Childs, Cleve.	335	1915—L. Doyle, N. Y.	320	1939—J. R. Mize, St. L.	349
1893—D. Brouthers, Bklyn.	335	1916—H. Chase, Cin.	339	1940—D. Garmis, Pitts.	356
1894—Hugh Duffy, Bos.	378	1917—E. J. Roush, Cin.	341	1941—H. P. Reiser, Bklyn.	343
1895—J. Burkett, Cleve.	423	1918—Z. D. Wheat, Bklyn.	335	1942—E. N. Lombardi, Bos.	330
1896—J. Burkett, Cleve.	410	1919—E. J. Roush, Cin.	321	1943—S. F. Musial, St. L.	357
1897—W. Keeler, Balt.	432	1920—Rogers Hornsby, St. L.	370	1944—F. Walker, Bklyn.	357
1898—W. Keeler, Balt.	379	1921—Rogers Hornsby, St. L.	397	1945—P. J. Cavarretta, Chicago	359
		1922—Rogers Hornsby, St. L.	401	1946—S. F. Musial, St. L.	365

American League Batting Champions

(Based on minimum of 100 games played.)

Year	Pct.	Year	Pct.	Year	Pct.
1900—S. M. Dungan, K. C.	337	1916—T. Speaker, Cleve.	386	1932—D. Alexander, Det.-Bos.	367
1901—N. Lajoie, Phila.	405	1917—T. R. Cobb, Det.	383	1933—J. E. Foxx, Phila.	356
1902—E. J. Delahanty, Wash.	376	1918—T. R. Cobb, Det.	382	1934—H. L. Gehrig, N. Y.	363
1903—N. Lajoie, Cleve.	355	1919—T. R. Cobb, Det.	384	1935—C. S. Meyer, Wash.	349
1904—N. Lajoie, Cleve.	381	1920—G. H. Sisler, St. L.	407	1936—L. B. Appling, Chi.	389
1905—Elmer Flick, Cleve.	306	1921—H. E. Heilmann, Det.	394	1937—C. L. Gehringer, Det.	371
1906—G. Stone, St. L.	358	1922—G. H. Sisler, St. L.	420	1938—J. E. Foxx, Bos.	349
1907—T. R. Cobb, Det.	350	1923—H. E. Heilmann, Det.	403	1939—J. P. DiMaggio, N. Y.	381
1908—T. R. Cobb, Det.	324	1924—G. H. Ruth, N. Y.	378	1940—J. P. DiMaggio, N. Y.	352
1909—T. R. Cobb, Det.	377	1925—H. E. Heilmann, Det.	393	1941—T. S. Williams, Bos.	406
1910—T. R. Cobb, Det.	385	1926—H. E. Manush, Det.	378	1942—T. S. Williams, Bos.	356
1911—T. R. Cobb, Det.	420	1927—H. E. Heilmann, Det.	398	1943—L. B. Appling, Chi.	328
1912—T. R. Cobb, Det.	410	1928—L. A. Goslin, Wash.	379	1944—L. Boudreau, Cleve.	327
1913—T. R. Cobb, Det.	390	1929—L. A. Fonseca, Cleve.	369	1945—G. H. Stinson, N. Y.	303
1914—T. R. Cobb, Det.	368	1930—A. H. Simmons, Phila.	381	1946—J. B. Vernon, Wash.	353
1915—T. R. Cobb, Det.	369	1931—A. H. Simmons, Phila.	390		

Two No-Hit Games in Majors in 1946

Ed Head of the Brooklyn Dodgers and Bobby Feller of the Cleveland Indians were the only pitchers in both major leagues to hurl no-hit no-run games during the 1946 season. Head's performance was against the Boston Braves on April 23, while Feller turned the trick against the New York Yankees one week later.

Kerr, Giants, Sets Fielding Mark

Buddy Kerr of the New York Giants set a major league fielding record for shortstops by completing 52 games in succession without an error in 1946. Kerr handled 275 chances faultlessly. Leo Durocher, playing with the Cincinnati Reds in 1931, set the previous mark of 51 errorless games, but he handled only 231 chances during his skein.

Giants' Great Winning Streak

The New York Giants, then managed by the late John McGraw, had two remarkable winning streaks in 1916, the first consisting of 17 victories in succession in the early part of the season and the second covering 26 games in a row at the tail end of the campaign. The first streak was oddly enough, made completely on the road, while the second skein was made at home. During the 26-game procession, still the major league record, the Giants swept seven double-headers. Actually the Giants played 27 games from September 7 to 30, but a 1-1 eight-inning tie with Pittsburgh in the second game of a twin bill played between the twelfth and thirteenth victories interrupted the record, but did not count against it. Despite their record, the Giants finished fourth, Brooklyn winning the pennant.

Major League Individual All-Time Records

ighest batting percentage, season—Hugh Duffy, Boston (N), 1894	483
ighest batting percentage (10 or more years)—Ty Cobb, Detroit and Philadelphia (A), 1905-28	367
ast years batting .300 or better—Ty Cobb	23
ast hits—Ty Cobb	4,191
ast hits, season—George Sisler, St. Louis (A), 1920	257
ast consecutive hits, game—Wilbert Robinson, Baltimore (N), 1892	7
ast hits in succession—Frank Higgins, Boston (A), 1938	12
ast consecutive games batted safely—Joe DiMaggio, New York (A), May 15 to July 6, 1941	56
ast long hits—Babe Ruth, Boston and New York (A), Boston (N), 1914-35 (506 2b, 136 3b, 714 home runs)	1,356
ast total bases—Ty Cobb	5,863
ast total bases, season—Babe Ruth, New York (A), 1921	457
ast total bases, game—Bobby Lowe, Boston (N), 1894; Ed Delahanty, Philadelphia (N), 1896 (both hit 4 home runs, 1 single)	17
ast home runs—Babe Ruth	714
ast home runs, season—Babe Ruth, New York (A), 1927	60

Most home runs, single game—Bobby Lowe, Boston (N), 1894; Ed Delahanty, Philadelphia (N), 1896; Lou Gehrig, New York (A), 1932; Chuck Klein, Philadelphia (N), 1936 (10 innings)	4
Most runs—Ty Cobb	2,244
Most runs batted in—Babe Ruth	2,209
Most runs batted in, season—Hack Wilson, Chicago (N), 1930	190
Most games played—Ty Cobb	3,033
Most consecutive games played—Lou Gehrig, New York (A), June 1, 1925 to May 2, 1939	2,130
Longest service as player—Eddie Collins, Philadelphia and Chicago (A), 1906-30; Bobby Wallace, Cleveland (N) and St. Louis (A), 1894-1918	25 years
Most times at bat—Ty Cobb	11,429
Most bases on balls, season—Babe Ruth, 1923	170
Most bases on balls, game (modern record)—Jimmy Fogg, Boston (A), 1938	6
Most stolen bases—Ty Cobb	892
Most stolen bases, season (modern record)—Ty Cobb, Detroit (A), 1915	96
Fewest strikeouts, season (150 or more games)—Joe Sewell, Cleveland (A), 1925, 1929	4

PITCHING

ast games—Cy Young (472 in National League, 402 in American League), 1890-1911	874
ast games won—Cy Young, Cleveland (N), 1890-98; St. Louis (N), 1899-1900; Boston (A), 1901-08; Cleveland (A), 1909-11 (part); Boston (N), 1911 (part)	511
ast complete games, season—Jack Chesbro, New York (A), 1904	48
ast games, season (modern record)—Ace Adams, New York (N), 1943	70
ast innings, season—Ed Walsh, Chicago (A), 1908	464
ewest earned-run average, season—Ferdie Schupp, New York (N), 1916	0.90
ewest hits in two consecutive games—John Vander Meer, Cincinnati (N), 1938 (both no-hit games)	0

Most games won, season (modern record)—Jack Chesbro, New York (A), 1904	41
Most consecutive games won, season—Tim Keefe, New York (N), 1888; Rube Marquard, New York (N), 1912	19
Most shutout games—Walter Johnson, Washington (A), 1907-27	113
Most shutout games, season—Grover Alexander, Philadelphia (N), 1916	16
Most consecutive shutout innings—Walter Johnson, 1913	56
Most strikeouts—Walter Johnson	3,497
Most strikeouts in 9 innings (1901 to date)—Bobby Feller, Cleveland (A) vs. Detroit, Oct. 2, 1938	18
Most strikeouts, season (modern record)—Bobby Feller, Cleveland (A), 1946	348

Wambsganss and E. Smith Starred in 1920 World Series

World series history was made in the fifth game of the 1920 Brooklyn-Cleveland classic when Bill Wambsganss, Indian second baseman, executed an unassisted triple play and Elmer Smith, Cleveland out-

fielder, became the first player to hit a home run with the bases filled. Smith's feat was duplicated by Tony Lazzeri in the 1936 event between the New York Yankees and the New York Giants.

RECORD OF ALL-STAR GAMES

(Winning pitcher in heavy capitals. Losing pitcher in light capitals.)

FIRST GAME

At Chicago (AL), July 6, 1933

R. H. E.

Nationals..... 0 0 0 0 0 2 0 0 0—2 8 0
 Americans..... 0 1 2 0 0 1 0 0 x—4 9 1

Batteries—HALLAHAN, Warneke, Hubbell, P.; J. Wilson, Hartnett, C.; GOMEZ, Crowder, Grove, P.; R. Ferrell, C.

Paid attendance—49,200.

SECOND GAME

At New York (NL), July 10, 1934

R. H. E.

Americans..... 0 0 0 2 6 1 0 0 0—9 14 1
 Nationals..... 1 0 3 0 3 0 0 0 0—7 8 1

Batteries—Gomez, Ruffing, HARDER, P.; Dickey, Cochrane, C.; Hubbell, Warneke, MUNGO, J. Dean, Frankhouse, P.; Hartnett, Lopez, C.

Paid attendance—48,363.

THIRD GAME

At Cleveland (AL), July 8, 1935

R. H. E.

Nationals..... 0 0 0 1 0 0 0 0 0—1 4 1
 Americans..... 2 1 0 0 1 0 0 0 x—4 8 0

Batteries—WALKER, Schumacher, Derringer, J. Dean, P.; J. Wilson, Hartnett, C.; GOMEZ, Harder, P.; Hemsley, C.

Paid attendance—69,812.

FOURTH GAME

At Boston (NL), July 7, 1936

R. H. E.

Americans..... 0 0 0 0 0 0 3 0 0—3 7 1
 Nationals..... 0 2 0 0 2 0 0 0 x—4 9 0

Batteries—GROVE, Harder, Rowe, P.; R. Ferrell, Dickey, C.; J. DEAN, Davis, Hubbell, Warneke, P.; Hartnett, C.

Paid attendance—25,556.

FIFTH GAME

At Washington (AL), July 7, 1937

R. H. E.

Nationals..... 0 0 0 1 1 1 1 0 0 0—3 13 0
 Americans..... 0 0 2 3 1 2 0 0 x—8 13 2

Batteries—J. DEAN, Hubbell, Blanton, Grissom, Mungo, Walters, P.; Hartnett, Mancuso, C.; GOMEZ, Bridges, Harder, P.; Dickey, C.

Paid attendance—31,391.

SIXTH GAME

At Cincinnati (NL), July 6, 1938

R. H. E.

Americans..... 0 0 0 0 0 0 0 0 1—1 7 4
 Nationals..... 1 0 0 1 0 0 2 0 x—4 8 0

Batteries—GOMEZ, Allen, Grove, P.; Dickey, C.; VANDER MEER, Lee, Brown, P.; Lombardi, C.

Paid attendance—27,067.

SEVENTH GAME

At New York (AL), July 11, 1939

R. H. E.

Nationals..... 0 0 1 0 0 0 0 0 0—1 7 1
 Americans..... 0 0 0 2 1 0 0 0 x—3 6 1

Batteries—Derringer, LEE, Fette, P.; Lombardi, C. Ruffin, BRIDGES, Feller, P.; Dickey, C.

Paid attendance—62,892.

EIGHTH GAME

At St. Louis (NL), July 9, 1940

R. H. E.

Americans..... 0 0 0 0 0 0 0 0 0—0 3 1
 Nationals..... 3 0 0 0 0 0 0 1 x—4 7 0

Batteries—RUFFING, Newsom, Feller, P.; Dickey, Hayes, Hemsley, C.; DERRINGER, Walters, Wyatt, French, Hubbell, P.; Lombardi, Phelps, Danning, C.

Paid attendance—32,373.

NINTH GAME

At Detroit (AL), July 8, 1941

R. H. E.

Nationals..... 0 0 0 0 0 1 2 2 0—5 10 2
 Americans..... 0 0 0 1 0 1 0 1 4—7 11 3

Batteries—Wyatt, Derringer, Walters, PASSEAU, P.; Owen, Lopez, Danning, C.; Feller, Lee, Hudson, SMITH, P.; Dickey, Hayes, C.

Paid attendance—54,674.

TENTH GAME

At New York (NL), July 6, 1942

R. H. E.

Americans..... 3 0 0 0 0 0 0 0 0—3 7 0
 Nationals..... 0 0 0 0 0 0 1 0—1 6 1

Batteries—CHANDLER, Benton, P.; Tebbetts, C.; M. COOPER, Vander Meer, Passeau, Walters, P.; W. Cooper, Lombardi, C.

Paid attendance—33,694.

ELEVENTH GAME

At Philadelphia (AL), July 13, 1943

R. H. E.

Nationals..... 1 0 0 0 0 0 1 0 1—3 10 1
 Americans..... 0 3 1 0 1 0 0 0 x—5 8 2

Batteries—M. COOPER, Vander Meer, Sewell, Javery, P.; W. Cooper, Lombardi, C.; LEONARD, Newhouser, Hughson, P.; Early, C.

Paid attendance—31,938.

TWELFTH GAME

At Pittsburgh (NL), July 11, 1944

R. H. E.

Americans..... 0 1 0 0 0 0 0 0 0—1 6 3
 Nationals..... 0 0 0 4 0 0 2 1 x—7 12 1

Batteries—Borowy, HUGHSON, Muncieff, Newhouser, Newsom, P.; Hemsley, Hayes, C.; Walters, RAFFENBERGER, Sewell, Tobin, P.; W. Cooper, Mueller, C.

Paid attendance—29,589.

NO GAME IN 1945

THIRTEENTH GAME

At Boston (AL), July 9, 1946

R. H. E.

Nationals..... 0 0 0 0 0 0 0 0 0—0 3 0
 Americans..... 2 0 0 1 3 0 2 4 x—12 14 1

Batteries—FELLER, Newhouser, Kramer, P.; Hayes, Wagner, Rosar, C.; PASSEAU, Higbe, Blackwell, Sewell, P.; W. Cooper, Masi, C.

Paid attendance—34,906.

Minor League Baseball

Source: L. H. Addington, Director, Press Bureau, National Association of Professional Baseball Leagues, Durham, N. C.

NATIONAL ASSOCIATION PENNANT WINNERS IN 1946

CLASS AAA

League and club finishing first	Play-off winner
American Association—Louisville*	Louisville
International—Montreal*	Montreal
Pacific Coast—San Francisco*	San Francisco

CLASS AA

Southern Association—Atlanta*	Atlanta
Texas—Fort Worth	Dallas*

CLASS A

Eastern—Scranton*	Scranton
South Atlantic—Columbus, Ga.*	Augusta

CLASS B

Inter-State—Wilmington, Del.*	Harrisburg
New England—Lynn*	Nashua
Piedmont—Roanoke*	Newport News
Southeastern—Pensacola*	Anniston
Three-I—Davenport*	Evansville
Tri-State—Charlotte*	Charlotte
Western International—Wenatchee*	None played

CLASS C

Border—Auburn*	Watertown
California—Stockton*	Stockton
Canadian-American—Three Rivers*	Three Rivers
Carolina—Greensboro*	Raleigh
East Texas—Henderson*	Henderson
Florida International (1st half)—Havana†	Tampa
Florida International (2d half)—Tampa†	Erie
Middle Atlantic—Erie*	St. Cloud
Northern—St. Cloud*	
Pioneer (1st half)—Twin Falls	Salt Lake City*
Pioneer (2d half)—Salt Lake City	
Western Assn. (1st half)—Fort Smith	Hutchinson*
Western Assn. (2d half)—Hutchinson	Pampa*
West Texas-New Mexico—Abilene	

CLASS D

Alabama State—Dothan*	Geneva
Appalachian—New River*	New River
Blue Ridge—Lenoir*	None played
Coastal Plain—Rocky Mount*	Rocky Mount
Eastern Shore—Centreville*	Centreville
Evangeline—Houma*	Houma
Florida State—Orlando*	Orlando
Georgia-Alabama—Carrollton*	Tallassee
Georgia-Florida—Americus*	Moultrie
Kansas-Okla.-Missouri—Chanute*	Chanute and Iola†
Kitty—Owensboro*	Owensboro
North Atlantic—Peekskill*	Peekskill
N. C. State—Concord*	Mooresville
Ohio State—Springfield*	Zanesville
Pony—Jamestown and Batavia‡	Batavia
Tobacco State—Sanford, N. C.*	Angier-Fuquay
Wisconsin State—Green Bay*	None played

*Won championship. †Havana and Tampa declared co-champions. ‡Series ended with teams tied at three games each. Chanute and Iola declared co-champions of play-off. §Jamestown and Batavia finished season in tie and teams were declared co-champions. Note—In Three-I League, Davenport and Danville finished the season in a tie, Davenport winning the play-off game for the championship.

INTER-LEAGUE SERIES RESULTS

Montreal (International League) defeated Louisville (American Association), 4 games to 2, in Little World Series.

Dallas (Texas League) defeated Atlanta (Southern Association), 4 games to 0, in Dixie Series.

Pampa (West Texas-New Mexico League) defeated Henderson (East Texas League), 4 games to 0.

Orlando (Florida State League) defeated Moultrie (Georgia-Florida League), 4 games to 0.

Tallassee (Georgia-Alabama League) defeated Geneva (Alabama State League), 4 games to 0.

FINAL 1946 STANDINGS

(Regular season)

INTERNATIONAL LEAGUE (AAA)

	W.	L.	Pct.
Montreal	100	54	.645
Syracuse	81	72	.529
Baltimore	81	73	.526
Newark	80	74	.519
Buffalo	78	75	.510
Toronto	71	82	.464
Rochester	65	87	.428
Jersey City	57	96	.373

SOUTHERN ASSOCIATION (AA)

	W.	L.	Pct.
Atlanta	96	58	.623
Memphis	90	63	.588
Chattanooga	79	73	.520
New Orleans	75	77	.493
Nashville	75	78	.490
Mobile	75	78	.490
Birmingham	68	84	.447
Little Rock	52	99	.344

AMERICAN ASSOCIATION (AAA)

	W.	L.	Pct.
Louisville	92	61	.601
Indianapolis	88	65	.575
St. Paul	80	71	.530
Minneapolis	76	75	.503
Milwaukee	70	78	.473
Toledo	69	84	.451
Kansas City	67	82	.450
Columbus	64	90	.416

EASTERN LEAGUE (A)

	W.	L.	Pct.
Scranton	96	43	.691
Albany	78	62	.557
Wilkes-Barre	76	62	.551
Hartford	71	67	.514
Elmira	65	72	.474
Utica	59	80	.424
Williamsport	59	80	.424
Binghamton	51	89	.364

PACIFIC COAST LEAGUE (AAA)

	W.	L.	Pct.
San Francisco	115	68	.628
Oakland	111	72	.607
Hollywood	95	88	.519
Los Angeles	94	89	.514
Sacramento	94	92	.505
San Diego	78	108	.419
Portland	74	109	.404
Seattle	74	109	.404

SOUTH ATLANTIC (SALLY) LEAGUE (A)

	W.	L.	Pct.
Columbus	79	60	.568
Columbia	79	61	.564
Greenville	76	62	.551
Augusta	76	63	.547
Jacksonville	65	75	.464
Charleston	65	75	.464
Macon	61	79	.436
Savannah	55	81	.404

TEXAS LEAGUE (AA)

	W.	L.	Pct.
Fort Worth	101	53	.656
Dallas	91	63	.591
San Antonio	87	65	.572
Tulsa	84	69	.549
Beaumont	70	83	.458
Houston	64	89	.418
Shreveport	61	92	.399
Oklahoma City	54	98	.355

NEW ENGLAND LEAGUE (B)

	W.	L.	Pct.
Lynn	82	40	.672
Nashua	80	41	.661
Manchester	75	45	.625
Pawtucket	70	54	.565
Lawrence	65	53	.551
Providence	64	60	.516
Fall River	30	94	.242
Portland	20	99	.168

A number of new managers will lead major league teams in 1947. Stanley R. (Bucky) Harris was appointed pilot of the Yankees, while another change finds Herold (Muddy) Ruel in charge of the Browns. Johnny Neun was given the post left open when Bill McKechnie resigned as manager

of the Reds, McKechnie moving to the Indians as a coach.

Billy Herman replaced Frankie Frisch as leader of the Pirates. Another important move found Charlie Dressen, Dodgers coach, shifting to the Yankees as a coach under Harris.

Final 1946 Standings—(cont.)

SOUTHEASTERN LEAGUE (B)

	W.	L.	Pct.
Wilmington	85	48	.639
Harrisburg	81	59	.579
Hagerstown	70	63	.526
Allentown	66	70	.485
York	64	71	.474
Sunbury	60	76	.441
Trenton	60	77	.438
Lancaster	56	78	.418

INTER-STATE LEAGUE (B)

	W.	L.	Pct.
Wilmington	87	53	.621
Harrisburg	76	64	.543
Hagerstown	74	65	.532
Allentown	69	70	.496
York	68	70	.493
Sunbury	67	73	.479
Trenton	60	78	.435
Lancaster	55	83	.399

THREE-I LEAGUE (B)

	W.	L.	Pct.
Davenport	77	44	.636
Asheville	76	45	.628
Knoxville	68	51	.571
Shelby	63	60	.512
Anderson	61	63	.492
Spartanburg	48	57	.457
Charlotte	43	71	.377
Asheville	37	82	.311

TRI-STATE LEAGUE (B)

	W.	L.	Pct.
Charlotte	93	46	.669
Asheville	83	56	.597
Knoxville	73	67	.521
Shelby	59	81	.421
Anderson	59	81	.421
Spartanburg	52	87	.374

*Won play-off for first place.

WESTERN INTERNATIONAL LEAGUE (B)

	W.	L.	Pct.
Wenatchee	89	54	.622
Salem	79	63	.556
Bremerton	73	63	.537
Tacoma	76	67	.531
Yakima	71	69	.507
Vancouver	65	71	.478
Spokane	54	78	.409
Victoria	49	91	.350

PIEDMONT LEAGUE (B)

	W.	L.	Pct.
Roanoke	89	51	.636
Portsmouth	83	57	.593
Newport News	76	64	.543
Norfolk	71	69	.507
Richmond	60	80	.429
York	41	99	.293

LITTLE WORLD SERIES RECORD

Source: Heilbroner Baseball Bureau.

PC—Pacific Coast League; I—International League; AA—American Association.

Year	Winner	Games won	Loser	Games won	Year	Winner	Games won	Loser	Games won
1919	Vernon, PC	5	St. Paul, AA	4	1933	Columbus, AA	5	Buffalo, I	3
1920	Baltimore, I	5	St. Paul, AA	1	1934	Columbus, AA	5	Toronto, I	4
1921	Louisville, AA	5	Baltimore, I	3	1935	No series			
1922	Baltimore, I	5	St. Paul, AA	2	1936	Milwaukee, AA	4	Buffalo, I	1
1923	Kansas City, AA	5	Baltimore, I	4	1937	Newark, I	4	Columbus, AA	3
1924*	St. Paul, AA	5	Baltimore, I	4	1938	Kansas City, AA	4	Newark, I	3
1925	Baltimore, I	5	Louisville, AA	3	1939	Louisville, AA	4	Rochester, I	3
1926	Toronto, I	5	Louisville, AA	0	1940	Newark, I	4	Louisville, AA	2
1927	Toledo, AA	5	Buffalo, I	1	1941	Columbus, AA	4	Montreal, I	2
1928*	Indianapolis, AA	5	Rochester, I	1	1942	Columbus, AA	4	Syracuse, I	1
1929	Kansas City, AA	5	Rochester, I	4	1943	Columbus, AA	4	Syracuse, I	1
1930	Rochester, I	5	Louisville, AA	3	1944	Baltimore, I	4	Louisville, AA	2
1931	Rochester, I	5	St. Paul, AA	3	1945	Louisville, AA	4	Newark, I	2
1932	Newark, I	4	Minneapolis, AA	2	1946	Montreal, I	4	Louisville, AA	2

*Played tie game.

Robinson Stars in Little World Series

The Montreal Royals, led by its Negro star, Jackie Robinson, won the 1946 Junior World Series, highlight of the minor league season, from Louisville, four games to two. Robinson, playing his first season in organized baseball, helped the International League champions win the pennant by 18½ games and topped the loop in batting with an average of .349. In the junior classic Robinson was held to one

hit in the first three games, then picked up seven safeties in the remaining three to finish with a .333 average. He will be looked over by the Brooklyn Dodgers during spring training.

The triumph was the first for Montreal in Little World Series competition. The Canadian team is the property of the Dodgers and is managed by the veteran Clay Hopper.

BOXING

WHETHER it be called pugilism, prize fighting or boxing, there is no tracing "the Sweet Science" to any definite source. Tales of rivals exchanging blows for fun, fame or money go back to earliest recorded history and classical legend. There was a mixture of boxing and wrestling called the "pancratium" in the ancient Olympic Games and in such contests the rivals belabored one another with hands fortified with heavy leather wrappings that were sometimes studded with metal. More than one Olympic competitor lost his life at this brutal exercise.

There was little law or order in pugilism until Jack Broughton, one of the early champions of England, drew up a set of rules for the game in 1743. Broughton, called "the father of English boxing", also is credited with having invented boxing gloves. However, these gloves—or "mufflers" as they were called—were used only in teaching "the manly art of self-defense" or in training bouts. All professional

championship fights were contested with "bare knuckles" until 1892 when John L. Sullivan lost the heavyweight championship of the world to James J. Corbett in New Orleans in a bout in which both contestants wore regulation gloves.

The Broughton rules were superseded by the London Prize Ring Rules of 1838. The 8th Marquess of Queensberry, with the help of John G. Chambers, put forward the "Queensberry Rules" in 1866, a code that called for gloved contests. Amateurs took quickly to the Queensberry Rules, the professionals slowly.

There is no official international set of rules for boxing even today. Amateur organizations set rules for amateurs in different countries and professional rules set by boxing commissions vary even in different sections of the United States, but the variations are for the most part minor. A prize fighter doesn't have to change his style greatly to ply his trade anywhere in the world.

Boxing Statistics

Source: Nat Fleischer's *All-Time Ring Record Book*, published and copyrighted by The Ring Book Shop, Inc., Madison Square Garden, New York, N. Y.

Boxing's Big Gates

Date	Bout	Site	Receipts	Attendance
Sept. 27, 1927	Tunney-Dempsey	Chicago	\$2,658,660	104,943
June 19, 1946	Louis-Conn.	New York	1,925,564	45,226
Sept. 23, 1926	Tunney-Dempsey	Philadelphia	1,895,733	120,757
July 2, 1921	Dempsey-Carpentier	Jersey City	1,789,238	80,000
Sept. 14, 1923	Dempsey-Firpo	New York	1,188,603	82,000
July 21, 1927	Dempsey-Sharkey	New York	1,083,530	75,000
June 22, 1938	Louis-Schmeling	New York	1,015,012	70,000
Sept. 24, 1935	Louis-Max Baer	New York	1,000,832	88,150
June 12, 1930	Schmeling-Sharkey	New York	749,935	79,222
June 22, 1937	Louis-Braddock	Chicago	715,470	45,500
July 26, 1928	Tunney-Heeney	New York	691,014	45,890
Sept. 29, 1941	Louis-Nova	New York	583,711	56,549
June 19, 1936	Schmeling-Louis	New York	547,541	42,088
Sept. 11, 1924	Firpo-Wills	Jersey City	509,135	70,000

LARGEST ATTENDANCE AT FIGHTS

The Jack Dempsey-Gene Tunney fight for the world's heavyweight championship at Sesqui-Centennial Stadium, Philadelphia, September 23, 1926, drew 120,757, the largest paid attendance. Tunney scored a ten-round decision over Dempsey and became the titleholder.

A crowd of 135,000 persons saw the Fraternal Order of Eagles' free card at Milwaukee, Wis., August 18, 1941. Tony Zale knocked out Billy Pryor in the main bout.

SHORTEST FIGHTS ON RECORD

Rudy Zymek knocked out Alex Luke, 11 seconds, Newark, N. J., October 9, 1939.

Willard Dean knocked out Claude Allen, 11 seconds, Corpus Christi, Texas, May 12, 1940.

Irish Jimmy Pierce knocked out Tommy Jessup, 11 seconds, Holyoke, Mass., March 9, 1942.

Joe Jakes knocked out Al Foreman, 11 seconds, Broadway Arena, Brooklyn, January 13, 1942.

HISTORY OF HEAVYWEIGHT CHAMPIONSHIP FIGHTS

(Bouts in which title changed hands)

July 8, 1889, Richburg, Miss.—John L. Sullivan (198) beat Jake Kilrain (195), 75 rounds. (Last bare-knuckle championship fight.)

Sept. 7, 1892, New Orleans, La.—James J. Corbett (178) defeated Sullivan (212), 21 rounds. (Used big gloves for first time.)

March 17, 1897, Carson City, Nevada—Bob Fitzsimmons (167) knocked out Corbett (183), 14 rounds.

June 9, 1899, Coney Island, New York—James J. Jeffries (206) knocked out Fitzsimmons (167), 11 rounds.

March, 1905—Lack of opposition forced Jeffries to retire. He named Marvin Hart and Jack Root as the leading contenders and agreed to referee their fight at Reno, Nevada, July 3, 1905, with the stipulation that he would term the winner the world's heavyweight champion. Hart (190) knocked out Root (171), 12 rounds.

Feb. 23, 1906, Los Angeles, Calif.—Tommy Burns (180) defeated Hart (188), 20 rounds, and claimed the title. Another claimant was Philadelphia Jack O'Brien, who had fought a 20-round draw with Burns, Nov. 28, 1906.

May 8, 1907, Los Angeles, Calif.—Burns (180) beat O'Brien (167), 20 rounds.

Dec. 26, 1908, Sydney, New South Wales—Jack Johnson (196) knocked out Burns (176), 14 rounds. Police stopped the fight.

July 4, 1910, Reno, Nevada—Johnson (208) knocked out Jeffries (227), 15 rounds. (Jeffries came out of retirement to regain title but failed.)

April 5, 1915, Havana, Cuba—Jess Willard (230) knocked out Johnson (205½), 26 rounds.

July 4, 1919, Toledo, Ohio—Jack Dempsey (187) knocked out Willard (245), 3 rounds.

Sept. 23, 1926, Philadelphia—Gene Tunney (189½) defeated Dempsey (190), 10 rounds.

July 23, 1928, New York City—Tunney (192) knocked out Tom Heeney (203½), 11 rounds, and retired.

July 12, 1930, New York City—Max Schmeling (188) fought Jack Sharkey (197) for the title, Schmeling winning on a foul in the 4th round.

June 21, 1932, Long Island City—Sharkey (205) defeated Schmeling (188), 15 rounds.

June 29, 1933, Long Island City—Primo Carnera (260½) knocked out Sharkey (201), 6 rounds.

June 14, 1934, Long Island City—Max Baer (209½) knocked out Carnera (263¼), 11 rounds.

June 13, 1935, Long Island City—Jim Braddock (193¼) defeated Baer (209½), 15 rounds.

June 22, 1937, Chicago—Joe Louis (197¼) knocked out Braddock (197), 8 rounds.

Ages at Which Heavyweight Titles Were Won

Bob Fitzsimmons and Jack Johnson, each at the age of 37, were the oldest world heavyweight kings to enter the ring in defense of their crown. The age of champion and challenger for each title bout in which a championship changed hands since Sullivan whipped Ryan for American honors in 1882 follows:

WINNER

John L. Sullivan, 24
James J. Corbett, 26
Bob Fitzsimmons, 35
James J. Jeffries, 24
Jack Johnson, 30
Jess Willard, 32
Jack Dempsey, 24

LOSER

Paddy Ryan, 30
John L. Sullivan, 34
James J. Corbett, 31
Bob Fitzsimmons, 37
Tommy Burns, 27
Jack Johnson, 37
Jess Willard, 36

WINNER

Gene Tunney, 27
Max Schmeling, 25
Jack Sharkey, 30
Primo Carnera, 25
Max Baer, 25
James J. Braddock, 30
Joe Louis, 23

LOSER

Jack Dempsey, 31
Jack Sharkey, 28
Max Schmeling, 27
Jack Sharkey, 31
Primo Carnera, 26
Max Baer, 26
James J. Braddock, 32

Willie Pep's Records

Willie Pep, in winning the world featherweight championship in 1943, broke and made several records. At the age of 20 he was the youngest boxer to hold a world's title in the last 40 years; he smashed the receipts record for a featherweight bout indoors; he never lost a decision; he had never fought a draw; had never won or lost a bout on a foul; had never boxed a newspaper decision—all within 10 months. He won 62 fights in succession before losing to Sammy Angott, March 19, 1943.

First Major International Fight

John C. Heenan, America, and Tom Sayers, England, were the principals in the first international heavyweight championship fight, Farnborough, England, April 17, 1860. They fought 37 refereed rounds and five unrefereed, that official quitting to avoid assault at the hands of rowdies, who broke into the ring. The bout was called a draw. Among the spectators were Prince Albert and Prime Minister Lord Palmerston. A humorous verse on the fight was attributed to Thackeray.

Other Boxing Titleholders

LIGHT HEAVYWEIGHT CHAMPIONS

- 1903 —Jack Root, George Gardner
- 1903-05 —Bob Fitzsimmons
- 1905-12 —Philadelphia Jack O'Brien
- 1912-16 —Jack Dillon
- 1916-20 —Battling Levinsky
- 1920-22 —Georges Carpentier
- 1923 —Battling Siki
- 1923-25 —Mike McTigue
- 1925-26 —Paul Berlenbach
- 1926-27 —Jack Delaney (a)
- 1927 —Mike McTigue
- 1927-29 —Tommy Loughran (a)
- 1930-34 —Maxie Rosenbloom
- 1934-35 —Bob Olin
- 1935-39 —John Henry Lewis (a)
- 1939 —Melio Bettina
- 1939-41 —Billy Conn (a)
- 1941-46 —Gus Lesnevich
- (a) Abandoned title.

WELTERWEIGHT CHAMPIONS

- 1892-94 —Mysterious Billy Smith
- 1894-96 —Tommy Ryan
- 1896 —Kid McCoy (o)
- 1900 —Rube Ferns, Matty Matthews
- 1901 —Rube Ferns
- 1901-06 —Joe Walcott*
- 1906-07 —Honey Melody
- 1907 —Mike (Twin) Sullivan†
- 1915 —Ted Lewis†
- 1919-22 —Jack Britton
- 1922-26 —Mickey Walker
- 1926-27 —Pete Latzo
- 1927-29 —Joe Dundee
- 1929-30 —Jackie Fields
- 1930 —Young Jack Thompson
- 1930-31 —Tommy Freeman
- 1931 —Young Jack Thompson
- 1931-32 —Lou Brouillard
- 1932-33 —Jackie Fields
- 1933 —Young Corbett 3d
- 1933-34 —Jimmy McLarnin
- 1934 —Barney Ross
- 1934-35 —Jimmy McLarnin
- 1935-38 —Barney Ross
- 1938-40 —Henry Armstrong
- 1940-41 —Fritzie Zivic
- 1941-46 —Freddie Cochrane
- 1946 —Marty Servo (r), Ray Robinson

(o) Outgrew class. *Walcott lost on foul to Dixie Kid in 1904, but decision was disputed. Dixie Kid went abroad, outgrew class, and Walcott was again recognized as the champion. †Sullivan outgrew class. The title was claimed by Jimmy Gardner, Jimmy Clabby, Ray Bronson, Clarence (Kid) Ferns, Mike Gibbons, Kid Graves, Mike Glover, Ted Lewis, and Jack Britton but no one received recognition as titleholder until Ted Lewis established his claim in 1915. ‡Lewis outpointed Britton to gain undisputed possession of the crown on Aug. 31, 1915, and fought Britton a number of times over a period of four years with varying results until March 17, 1919, when Lewis again became the undisputed titleholder by knocking out Britton. (r) Retired.

JOHN L. SULLIVAN'S earnings from 1878 to 1915, including fights, vaudeville work and exhibition tours, were \$1,221,320. He received nothing when he lost the heavy-weight championship to Jim Corbett in 1892, there being a \$25,000 winner-take-all purse and a \$20,000 side bet on the outcome. Sullivan died in 1918.

MIDDLEWEIGHT CHAMPIONS

- 1867-72 —Tom Chandler (bare knuckles).
- 1872-81 —Geo. Rourke (bare knuckles and gloves)
- 1881-82 —Mike Donovan (r)
- 1884-91 —Jack (Nonpareil) Dempsey
- 1891-97 —Bob Fitzsimmons
- 1897-1907 —Tommy Ryan, Kid McCoy, Philadelphia Jack O'Brien (t)
- 1907-08 —Stanley Ketchel
- 1908 —Billy Papke
- 1908-10 —Stanley Ketchel
- 1910-13 —Billy Papke
- 1913 —Frank Klaus
- 1913-14 —George Chip
- 1914-17 —Al McCoy
- 1917-20 —Mike O'Dowd
- 1920-23 —Johnny Wilson
- 1923-26 —Harry Greb
- 1926 —Tiger Flowers
- 1926-31 —Mickey Walker (a)
- 1931-32 —Gorilla Jones (NBA); Ben Jey (N. Y. Comm.)
- 1932-37 —Marcel Thil*
- 1938 —Al Hostak and Solly Krieger (NBA)
- 1939 —Solly Krieger, Al Hostak (NBA); Ceferino Garcia (N. Y. Comm.)
- 1940 —Tony Zale (NBA); Ken Overlin (N. Y. Comm.)
- 1941 —Tony Zale (NBA); Billy Soose (N. Y. Comm.)†
- 1941-46 —Tony Zale

(r) Retired. (t) Title claimants. (a) Abandoned title. *Thil's international title disputed although his victory over Jones on a foul gave him clear claim. The N. Y. Comm. and NBA held elimination tournaments, Hostak emerging as NBA champion and Garcia as N. Y. titleholder. †Soose abandoned claim to title and Zale became undisputed ruler by defeating George Abrams, who had beaten Soose three times.

LIGHTWEIGHT CHAMPIONS

- 1885-96 —Jack McAuliffe*
- 1896-99 —Kid Lavigne
- 1899-02 —Frank Erne
- 1902-08 —Joe Gans
- 1908-10 —Battling Nelson
- 1910-12 —Ad Wolgast
- 1912-14 —Willie Ritchie
- 1914-17 —Freddie Welsh
- 1917-25 —Benny Leonard (r)
- 1925 —Jimmy Goodrich
- 1925-26 —Rocky Kansas
- 1926-30 —Sammy Mandell
- 1930 —Al Singer
- 1930-33 —Tony Canzoneri
- 1933-35 —Barney Ross
- 1935-36 —Tony Canzoneri
- 1936-38 —Lou Ambers
- 1938-39 —Henry Armstrong
- 1939-40 —Lou Ambers
- 1940-41 —Lew Jenkins
- 1941-42 —Sammy Angott†
- 1943 —Beau Jack, Bob Montgomery (N. Y. Comm.), Sammy Angott (NBA).
- 1944 —Beau Jack, Bob Montgomery (N. Y. Comm.), Sammy Angott, Juan Zurita (NBA).
- 1945 —Bob Montgomery (N. Y. Comm.), Juan Zurita, Ike Williams (NBA).
- 1946 —Bob Montgomery (N. Y. Comm.), Ike Williams (NBA).

*McAuliffe was champion of America, but never held the world crown, his battle for the world title with Jem Carney of England in 1887 resulting in a 74-round draw. (r) Retired. †Angott announced his retirement on Nov. 13, 1942, leaving title vacant, but approximately two months later announced his comeback as challenger for the crown.

FEATHERWEIGHT CHAMPIONS

- 1889 —Freddy Bogan
 1890 —Billy Murphy
 1892-1900—George Dixon
 1900-01—Terry McGovern
 1901 —Young Corbett (o)
 1904-08—Brooklyn Tommy Sullivan
 1908-12—Abe Attell
 1912-23—Johnny Kilbane
 1923 —Eugene Criqui
 1923-25—Johnny Dundee (o)
 1925-27—Louis (Kid) Kaplan (o)
 1927-28—Benny Bass
 1928 —Tony Canzoneri
 1928-29—Andre Routis
 1929-32—Battling Battalino (o)
 1932 —Tommy Paul (NBA); Kid Chocolate (N. Y. Comm.).
 1933-36—Freddie Miller
 1936-37—Petey Sarron
 1937-38—Henry Armstrong (a)
 1938-40—Joey Archibald
 1940-41—Harry Jeffra, Joey Archibald
 1941-42—Chalky Wright
 1942-46—Willie Pep
 (o)Outgrew class. (a)Abandoned title.

FLYWEIGHT CHAMPIONS

- 1916-23—Jimmy Wilde
 1923-25—Pancho Villa*
 1925 —Frankie Genaro
 1925-27—Fidel La Barba (r)
 1927 —Corporal Izzy Schwartz†
 1930 —Midget Wolgast (N. Y. Comm.); Frankie Genaro (NBA).
 1931-32—Young Perez†
 1932-35—Jackie Brown
 1935-38—Benny Lynch (r)
 1939 —Peter Kane (a)
 1943-46—Jackie Paterson

*Villa died in 1925, Genaro claiming title. †Schwartz was recognized as champion by N. Y. Comm., but conditions in the class became confused and were not straightened out until an elimination tourney was held in November, 1929. ‡Perez was recognized as world's champion by the International Boxing Union of Europe. (r)Retired. (a)Abandoned title.

International Bout Sets English Mark

A British record for gate receipts was set in 1946 when 12,000 fans paid \$176,000 to see Gus Lesnevich of the United States retain his world light heavyweight title by knocking out Freddie Mills, British contender, in the tenth round of their scheduled fifteen-round battle. The contest was held at the Harringay Stadium, London, on May 14.

Only Fighter to Hold Three Titles Simultaneously

Henry Armstrong won the featherweight championship from Petey Sarron at Madison Square Garden, October 29, 1937; welterweight title from Barney Ross, Madison Square Garden Bowl, May 31, 1938, and lightweight crown from Lou Ambers, Madison Square Garden, August 17, 1938.

BANTAMWEIGHT CHAMPIONS

- 1890-92—George Dixon (o)
 1894-99—Jimmy Barry (r)
 1899-1900—Terry McGovern (o)
 1901 —Harry Harris (o)
 1902-03—Harry Forbes
 1903-04—Frankie Neil
 1904 —Joe Bowker (o)
 1905-07—Jimmy Walsh (o)
 1910-14—Johnny Coulon
 1914-17—Kid Williams
 1917-20—Pete Herman
 1920-21—Joe Lynch
 1921 —Pete Herman
 1921-22—Johnny Buff
 1922-24—Joe Lynch
 1924 —Abe Goldstein
 1924-25—Eddie (Cannonball) Martin
 1925 —Charlie (Phil) Rosenberg (d)
 1929-35—Al Brown
 1935-36—Baltazar Sangchili
 1936 —Tony Marino
 1936-37—Sixto Escobar
 1937-38—Harry Jeffra
 1938-40—Sixto Escobar (r)
 1940-42—Lou Salica
 1942-46—Manuel Ortiz

(o)Outgrew class. (r)Retired. (d)Deprived of title when unable to make weight for championship bout.

Famous Firsts in Boxing

First famous fighter: Theagenes of Thaos, Champion of the Olympic Games, 450 B.C., winner of 1,406 battles with the cestus, a heavy iron-shodded glove. Most of his opponents were killed in these fights.

First modern ring champion: Jim Figg of England, 1719.

First set of boxing rules and first set of boxing gloves: Made by Jack Broughton, 1743.

First championship fight in America: Jacob Hyer beat Tom Beasley, 1816.

First glove fight: Between two English boxers, at Aix-la-Chapelle, France, October 8, 1818.

First contest in which motion pictures were filmed for general display to the public: Bob Fitzsimmons vs. Jim Corbett bout at Carson City, Nevada, 1897.

First million-dollar gate: Jack Dempsey vs. Georges Carpentier at Boyle's Thirty Acres, Jersey City, N. J., July 2, 1921 (\$1,789,238).

First fight broadcast: Dempsey vs. Carpentier, 1921, J. Andrew White announcer.

First fight to draw over 100,000 people: Jack Dempsey vs. Gene Tunney at Philadelphia, 1926 (120,757).

First fight on television: Eric Boon vs. Arthur Danahar, Harringway Arena, London, England, February 23, 1939.

Longest Fight on Record

Between Andy Bowen and Jack Burke at New Orleans, La., April 6, 1893. The 110-round fight took 7 hours, 19 minutes. Battle ended in a draw, the referee calling it no contest when the men couldn't continue.

Ring Record of Joe Louis

Born, May 13, 1914, Lexington, Alabama. Weight, 207 lb. Height, 6 ft. 2 in.

1934

July 4	Jack Kracken, Chicago.....	KO 1
July 11	Willie Davis, Chicago.....	KO 3
July 29	Larry Udell, Chicago.....	KO 2
Aug. 13	Jack Kranz, Chicago.....	W 6
Aug. 27	Buck Everett, Chicago.....	KO 2
Sept. 11	Alex Borchuk, Detroit.....	KO 4
Sept. 25	Adolph Wiater, Chicago.....	W 10
Oct. 24	Art Sykes, Chicago.....	KO 8
Oct. 30	Jack O'Dowd, Detroit.....	KO 2
Nov. 14	Stanley Poreda, Chicago.....	KO 1
Nov. 30	Charley Massera, Chicago.....	KO 3
Dec. 14	Lee Ramage, Chicago.....	KO 8

1935

Jan. 4	Patsy Perroni, Detroit.....	W 10
Jan. 11	Hans Birkie, Pittsburgh.....	KO 10
Feb. 1	Lee Ramage, Los Angeles.....	KO 2
Mar. 8	Donald Barry, San Francisco.....	KO 3
Mar. 28	Natie Brown, Detroit.....	W 10
Apr. 13	Roy Lazer, Chicago.....	KO 3
Apr. 24	Biff Benton, Dayton.....	KO 2
Apr. 27	Roscoe Toles, Flint.....	KO 6
May 3	Willie Davis, Peoria.....	KO 2
May 5	Gene Stanton, Kalamazoo.....	KO 3
June 25	Primo Carnera, Yankee Stadium.....	KO 6
Aug. 7	King Levinsky, Chicago.....	KO 1
Sept. 24	Max Baer, Yankee Stadium.....	KO 4
Dec. 13	Paulino Uzcudun, Madison Square Garden.....	KO 4

1936

Jan. 17	Charley Retzlaff, Chicago.....	KO 1
June 19	Max Schmeling, Yankee Stadium.....	KO by 12
Aug. 17	Jack Sharkey, Yankee Stadium.....	KO 3
Sept. 22	Al Ettore, Philadelphia.....	KO 5
Oct. 9	Jorge Brescia, Madison Square Garden.....	KO 3
Dec. 14	Eddie Simms, Cleveland.....	KO 1

RECAPITULATION

Bouts, 59; knockouts, 50; won decisions, 8; knocked out by, 1.

Ring Earnings of Joe Louis

Joe Louis successfully defended his heavyweight championship twice in 1946—knocking out Billy Conn in the eighth round at the Yankee Stadium on June 19 and disposing of Tami Mauriello in the first round on Sept. 18, also at the Stadium. His cumulative ring earnings soared to \$3,059,647 when he received \$577,669 for the Conn fight and \$103,611 for the battle with Mauriello. Other bouts in which his share was more than \$100,000 were with Max Baer, 1935 (\$240,833); Max Schmeling, 1936 (\$140,959); James J. Braddock, 1937 (\$103,684); Tommy Farr, 1937 (\$102,578); Max Schmeling, 1938 (\$349,228); Tony Galento, 1939 (\$114,332); Bob Pastor, 1939 (\$118,400); Billy Conn, 1941 (\$153,905), and Lou Nova, 1941 (\$199,500).

Neil Memorial Award Winners

The Edward J. Neil Memorial Plaque is given annually by the Boxing Writers' Association of New York to the individual who has done the most to further the cause of the sport. The winners:

1938	Jack Dempsey	1943	The boxers in all branches of the Armed Forces of our country.
1939	Billy Conn	1944	Lt. Comdr. Benny Leonard, U.S.M.S.
1940	Henry Armstrong	1945	James J. Walker
1941	Joe Louis	1946	Tony Zale
1942	Sgt. Barney Ross		

1937

Jan. 11	Stanley Ketchel, Buffalo.....	KO 2
Jan. 27	Bob Pastor, Madison Square Garden.....	W 10
Feb. 17	Natie Brown, Kansas City.....	KO 4
June 22	James J. Braddock, Chicago.....	KO 8
	(Won heavyweight championship of the world)	
Aug. 30	Tommy Farr, Yankee Stadium.....	W 15

1938

Feb. 23	Nathan Mann, Madison Square Garden.....	KO 3
Apr. 1	Harry Thomas, Chicago.....	KO 5
June 22	Max Schmeling, Yankee Stadium.....	KO 1

1939

Jan. 25	John Henry Lewis, Madison Sq. Garden.....	KO 1
Apr. 17	Jack Roper, Los Angeles.....	KO 1
June 28	Tony Galento, Yankee Stadium.....	KO 4
Sept. 20	Bob Pastor, Detroit.....	KO 11

1940

Feb. 9	Arturo Godoy, Madison Square Garden.....	W 15
Mar. 29	Johnny Paychek, Madison Square Garden.....	KO 2
June 20	Arturo Godoy, Yankee Stadium.....	KO 8
Dec. 16	Al McCoy, Boston.....	KO 6

1941

Jan. 31	Red Burman, Madison Square Garden.....	KO 5
Feb. 17	Gus Dorazio, Philadelphia.....	KO 2
Mar. 21	Abe Simon, Detroit.....	KO 13
Apr. 8	Tony Musto, St. Louis.....	KO 9
May 23	Buddy Baer, Washington, D. C.....	W disq. 7
June 18	Billy Conn, Polo Grounds.....	KO 13
Sept. 29	Lou Nova, Polo Grounds.....	KO 6

1942

Jan. 9	Buddy Baer, Madison Square Garden.....	KO 1
Mar. 27	Abe Simon, Madison Square Garden.....	KO 6

1946

June 19	Billy Conn, Yankee Stadium.....	KO 8
Sept. 18	Tami Mauriello, Yankee Stadium.....	KO 1

BARE-KNUCKLE HEAVYWEIGHT CHAMPIONS, 1719-1892

- 1719—Jim Figg
 1734—George Taylor
 1740—Jack Broughton
 1750—Jack Slack
 1760—Bill Stevens
 1761—George Meggs
 1765—Bill Darts
 1777—Harry Sellers
 1780—Jack Harris
 1785—Tom (Jackling) Johnson
 1790—Big Ben Brain
 1792—Daniel Mendoza
 1795—John Jackson (retired)
 1802—Jem Belcher
 1805—Henry Pearce (Game Chicken)
 1808—John Gully (declined title)
 1809—Tom Cribb received belt, not transferable, and cup
 1824—Tom Spring received four cups; resigned title.
 1825—Jem Ward received belt, not transferable
 1838—James (Deaf) Burke claimed title
 1839—William Thompson (Bendigo) beat Burke; claimed championship; received belt from Jem Ward.
 1841—Nick Ward (Jem's brother) beat Ben Caunt, Feb. 2. In return match Caunt beat Nick Ward and received belt by subscription. It was transferable.
 1845—Thompson beat Caunt and got belt.
 1850—Bill Perry (The Tipton Slasher), after fight with Paddock, claimed title.
 1851—Harry Broome won title from Perry.
 1853—Perry claimed title when Broome forfeited £200 to him in a match; retired from ring on Aug. 13.
 1857—Tom Sayers beat Perry for £200 a side and new belt.
 1860—Sayers retired after 42-round draw with John C. Heenan (The Benicia Boy), leaving old belt open for competition.
- 1860—Sam Hurst (The Stalybridge Infant) beat Paddock and received belt.
 1861—Jem Mace beat Hurst.
 1862—Mace beat Tom King for £200 a side and the belt.
 1862—King beat Mace and claimed belt. Subsequently gave it up. Declined to meet Mace again. Mace claimed belt.
 1863—King beat Heenan for £1,000 a side.
 1865—Joe Wormald beat Andrew Marsden for £200 a side and belt, which had been claimed by both. Belt was given to Wormald, who forfeited £120 to Mace.
 1866—Mace and Joe Goss fought draw with £200 a side and belt at stake.
 1867—Wormald received £200 forfeit from Ned O'Baldwin and claimed belt when O'Baldwin failed to appear at starting place.
 1867—Mace and O'Baldwin drew; £200 a side; title and belt in abeyance.
 1868—Wormald and O'Baldwin drew; £200 a side and title in America.
 1869—Mike McCoole beat Tom Allen in America for world championship.
 1870—Mace beat Allen in America for world championship.
 1871—Mace and Joe Coburn fought draw for championship; £500 a side.
 1882—John L. Sullivan defeated Paddy Ryan for American championship only; 9 rounds, Mississippi City, Miss. (London Prize Ring rules).
 1885—Jem Smith beat Jack Davis for £100 a side and championship of England.
 1887—Jake Kilrain and Jem Smith drew; £2000 and Police Gazette Championship of World belt.
 1889—John L. Sullivan beat Jake Kilrain; £2000 a side and Police Gazette belt at Richburg, Miss., July 8. (Sullivan claimed world title because of draw fought by Kilrain with England's titleholder, Smith.)

WORLD CHAMPIONSHIP FIGHTS IN 1946

Date	Winner	Loser	Title at stake	Where held	Rounds	Attendance
Feb. 1	*Marty Servo	Freddie Cochran	Welterweight	New York	KO 4	17,378
Feb. 25	Manuel Ortiz	Luis Castillo	Bantamweight	San Francisco	KO 13	10,000
Apr. 30	Ike Williams	Enrique Bolanos	Lightweight (NBA)	Los Angeles	KO 8	19,000
May 3	Sal Bartolo	Jack Armstrong	Featherweight	Boston	KO 6	7,614
May 14	Gus Lesnevich	Freddie Mills	Light Heavyweight	London	KO 10	12,000
May 25	Manuel Ortiz	Kenny Lindsay	Bantamweight	Hollywood, Calif.	KO 5	6,000
June 7	Willie Pep	Sal Bartolo	Featherweight	New York	KO 12	9,881
June 10	Manuel Ortiz	Jackie Jurich	Bantamweight	San Francisco	KO 11	8,000
June 19	Joe Louis	Billy Conn	Heavyweight	New York	KO 8	45,266
June 28	Bob Montgomery	Allie Stolz	Lightweight	New York	KO 13	10,872
July 10	Jackie Paterson	Joe Curran	Flyweight	Glasgow, Scotland	15	50,000
Sept. 4	Ike Williams	Ronnie James	Lightweight (NBA)	Cardiff, Wales	KO 9	45,000
Sept. 18	Joe Louis	Tami Mauriello	Heavyweight	New York	KO 1	38,494
Sept. 27	Tony Zale	Rocky Graziano	Middleweight	New York	KO 6	39,827
Nov. 26	Bob Montgomery	Wesley Mouzon	Lightweight	Philadelphia	KO 8	12,416
Dec. 20	*Ray Robinson	Tommy Bell	Welterweight	New York	15	15,670

*Won championship.

†Gained undisputed possession of title.

IRISH FOOTBALL

Kerry won the All-Ireland football championship in 1946 by downing Roscommon, two goals and eight points to ten points on a replay. A crowd of 60,000 saw Kerry win its sixteenth title.

The all-Missouri Valley Conference basketball team for 1946, selected by member coaches, was composed completely of players from the champion Oklahoma A. and M. College first team.

Mangrum Open Golf Victor

A double-round play-off among Lloyd Mangrum, Byron Nelson and Vic Ghezzi highlighted the 1946 National Open golf championship at the Canterbury Club, Cleveland. The three finished the 72-hole event in a triple tie with 284s, four under par. The first play-off round also resulted in a tie, each posting a 72 for the eighteen holes. Mangrum won the crown by shooting another 72 in the second play-off round, while his rivals faltered, both finishing one stroke behind.

TRACK AND FIELD

RUNNING, jumping, hurdling and throwing weights—track and field sports, in other words—are as natural to boys and young men as eating, drinking and breathing. Unorganized competition in this form of sport goes back beyond the Cave Man Era. Organized competition begins with the first recorded Olympic Games in Greece, 776 B. C., when Coroebus of Elis won the only event on the program, a race of approximately 200 yards. The Olympic Games, with an ever-widening program of events, continued until "the glory that was Greece" had faded and "the grandeur that was Rome" was tarnished, and finally were abolished by decree of Emperor Theodosius of Rome in 394 A. D. The Tailteann Games of Ireland are supposed to have antedated the first Olympic Games by some centuries, but we have no records of the specific events and winners thereof.

Professional contests of speed and strength were popular at all times and in many lands, but the widespread competition of amateur athletes in track and field

sports is a comparatively modern development. The first organized amateur athletic meet of record was sponsored by the Royal Military Academy at Woolwich, England, in 1849. Oxford and Cambridge track and field rivalry began in 1864 and the English amateur championships were established in 1866. In the United States such organizations as the New York Athletic Club and the Olympic Club of San Francisco conducted track and field meets in the 1870's, and a few colleges joined to sponsor a meet in 1874. The success of the college meet led to the formation of the Intercollegiate Association of Amateur Athletes of America and the holding of an annual set of championship games beginning in 1876.

Many athletic clubs joined the National Association of Amateur Athletes of America, formed in 1879, but dissension broke up this organization and the Amateur Athletic Union, organized in 1888, has been the ruling body in American amateur athletics since that time.

Track and Field Statistics

Source: *Official A.A.U. Track and Field Rules and Records Book*. Reprinted by courtesy of the publishers, the Amateur Athletic Union of the United States, 233 Broadway, New York, N. Y.

MEN'S WORLD RECORDS

Recognized by the International Amateur Athletic Federation, December 1945

• RUNNING

Event	Record	Holder	Country	Where made	Date
100 yd.	9.4s.	Frank Wykoff	United States	Los Angeles, Calif.	May 10, 1930
		Jesse Owens	United States	Ann Arbor, Mich.	May 25, 1935
		Clyde Jeffrey	United States	Long Beach, Calif.	Mar. 16, 1940
220 yd.	20.3s.	Jesse Owens	United States	Ann Arbor, Mich.	May 25, 1935
		Jesse Owens	United States	Chicago, Ill.	June 20, 1936
		Ben Eastman	United States	Palo Alto, Calif.	Mar. 26, 1932
440 yd.	46.4s.	Grover Klemmer	United States	Berkeley, Calif.	May 31, 1941
		Sydney C. Wooderson	Gt. Britain	London, England	Aug. 20, 1938
880 yd.	1m. 49.2s.	Gunder Hagg	Sweden	Malmo	July 17, 1945
1 mi.	4m. 01.4s.	Gunder Hagg	Sweden	Stockholm	Aug. 4, 1944
2 mi.	8m. 42.8s.	Gunder Hagg	Sweden	Gothenburg	Sept. 20, 1942
3 mi.	13m. 32.4s.	Gunder Hagg	Sweden	Gothenburg	Aug. 25, 1944
6 mi.	28m. 38.6s.	Viljo Heino	Finland	Helsinki	Aug. 25, 1944
10 mi.	49m. 41.6s.	Viljo Heino	Finland	Turko	Sept. 30, 1945
15 mi.	1h. 19m. 48.6s.	Erkki Tamila	Finland	Joensuu	Aug. 29, 1937
1 hr.	12mi. 29yd.	Viljo Heino	Finland	Turko	Sept. 30, 1945

WALKING

Event	Record	Holder	Country	Where made	Date
2 mi.	13m.	Werner Hardmo	Sweden	Malmo	July 17, 1944
7 mi.	48m. 53.6s.	Werner Hardmo	Sweden	Orebro	Oct. 1, 1944
10 mi.	1h. 11m. 58s.	Werner Hardmo	Sweden	Arvika	Oct. 8, 1944
20 mi.	2h. 41m. 7s.	H. Olsson	Sweden	Boras	Aug. 15, 1943
30 mi.	4h. 24m. 54.2s.	F. Cornet	France	Paris	Oct. 11, 1942
1 hr.	8mi. 1025yd.	John Mikaelsson	Sweden	Stockholm	Sept. 1, 1945
2 hr.	15mi. 1521yd.	Olle Andersson	Sweden	Stockholm	Sept. 15, 1945

RUNNING—METRIC DISTANCES

Event	Record	Holder	Country	Where made	Date
100 m	10.2s	Jesse Owens	United States	Chicago, Ill.	June 20, 1936
		Harold Davis	United States	Compton, Calif.	June 6, 1941
200 m	20.3s	Jesse Owens	United States	Ann Arbor, Mich.	May 25, 1935
400 m	46s	Rudolf Harbig	Germany	Frankfurt	Aug. 12, 1939
		Grover Klemmer	United States	Philadelphia, Pa.	June 29, 1941
800 m	1m.46.6s	Rudolf Harbig	Germany	Milan	July 15, 1939
1,000 m	2m.21.5s	Rudolf Harbig	Germany	Dresden	May 24, 1941
1,500 m	3m.43s	Gunder Hagg	Sweden	Gothenburg	July 7, 1944
2,000 m	5m.11.8s	Gunder Hagg	Sweden	Stockholm	Aug. 23, 1942
3,000 m	8m.1.2s	Gunder Hagg	Sweden	Stockholm	Aug. 28, 1942
5,000 m	13m.58.2s	Gunder Hagg	Sweden	Gothenburg	Sept. 20, 1942
10,000 m	29m.52.6s	Taisto Maki	Finland	Helsinki	Sept. 17, 1939
20,000 m	1h.3m.1.2s	Andras Csaplar	Hungary	Budapest	Oct. 26, 1941
25,000 m	1h.21m.27s	Erkki Tamila	Finland	Joensuu	Sept. 3, 1939
30,000 m	1h.40m.57.6s	Jose Ribas	Argentina	Buenos Aires	May 27, 1932
1h	19,210 m	Paavo Nurmi	Finland	Berlin	Oct. 7, 1928

WALKING—METRIC DISTANCES

Event	Record	Holder	Country	Where made	Date
3,000 m	11m.51.8s	Werner Hardmo	Sweden	Malmo	Sept. 1, 1945
5,000 m	20m.26.8s	Werner Hardmo	Sweden	Kumla	July 31, 1945
10,000 m	42m.39.6s	Werner Hardmo	Sweden	Kumla	Sept. 9, 1945
20,000 m	1h.32m.28.4s	John Mikaelsson	Sweden	Vaxjo	July 12, 1942
30,000 m	2h.28m.57.4s	H. Olsson	Sweden	Boras	Aug. 15, 1943
50,000 m	4h.34m.3.0s	Paul Sievert	Germany	Munchen	Oct. 5, 1924
1 hr	13,593 m	Werner Hardmo	Sweden	Arvika	Oct. 8, 1944
2 hr	25,263 m	Edgar Bruun	Norway	Kristinehamn	Oct. 8, 1939

HURDLES (10 hurdles)

Event	Record	Holder	Country	Where made	Date
120 yd	13.7s	Forrest G. Towns	United States	Oslo, Norway	Aug. 27, 1936
		Fred Wolcott	United States	Philadelphia, Pa.	June 29, 1941
220 yd	22.5s	Fred Wolcott	United States	Princeton, N. J.	June 8, 1940
440 yd	52.2s	R. Cochrane	United States	Des Moines, Iowa	Apr. 25, 1942
110 m	13.7s	Forrest G. Towns	United States	Oslo, Norway	Aug. 27, 1936
		Fred Wolcott	United States	Philadelphia, Pa.	June 29, 1941
200 m	22.3s	Fred Wolcott	United States	Princeton, N. J.	June 8, 1940
400 m	50.6s	Glenn Hardin	United States	Stockholm	July 26, 1934

RELAY RACES

Event	Record	Holder	Country	Where made	Date
440 yd. (4x110)	40.5s	Univ. of California	United States	Fresno, Calif.	May 14, 1938
		(L. LaFond, W. C. Andersson, P. Jordan, A. Talley)			
880 yd. (4x220)	1m.25s	Stanford Univ.	United States	Fresno, Calif.	May 15, 1937
		(Kneubuhl, Hiserman, Malott, Weiershauser)			
1 mi. (4x440)	3m.9.4s	Univ. of California	United States	Los Angeles	June 17, 1941
		(John Reese, F. A. Froom, C. F. Barnes, Grover Klemmer)			
2 mi. (4x880)	7m.34.6s	Stanford Univ.	United States	Los Angeles	May 24, 1941
		(John Reese, Grover Klemmer, Dick Peter, Clarence Barnes)			
4 mi. (4x1mile)	17m.2.8s	Brandkarens Idrottsklub	Sweden	Stockholm	Aug. 15, 1941
		Sthlm (Ake Jansson, Hugo Karlen, Henry Kalarne, Bror Hellstrom)			

RELAY RACES—METRIC DISTANCES

Event	Record	Holder	Country	Where made	Date
400 m. (4x100)	39.8s	U. S. A. National Team	United States	Berlin	Aug. 9, 1936
		(Owens, Metcalfe, Draper, Wykoff)			
800 m. (4x200)	1m.25s	Stanford Univ.	United States	Fresno, Calif.	May 15, 1937
		(Kneubuhl, Hiserman, Malott, Weiershauser)			
1600 m. (4x400)	3m.8.2s	U. S. A. National Team	United States	Los Angeles	Aug. 7, 1932
		(Fuqua, Ablowich, Warner, Carr)			
3,200 m. (4x800)	7.30.4s	German National Team	Germany	Braunschweig	Aug. 23, 1941
		(Hans Seibert, Alfred Grau, Ludwig Kaindl, Rudolf Harbig)			
6,000 m. (4x1500)	15m.38.6s	Malmo Allm. IF	Sweden	Norrokoping	July 29, 1945
		(Jakobson, Stridsberg, Strand, Hagg)			

DECATHLON

7,900 points	Glenn Morris	United States	Berlin	Aug. 7-8, 1936
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FIELD EVENTS

Event	Record	Holder	Country	Where made	Date
High jump	6ft.11in.	Les Steers	United States	Los Angeles	June 17, 1941
Running broad jump	26ft.8 $\frac{1}{4}$ in.(8.13m.)	Jesse Owens	United States	Ann Arbor	May 25, 1935
Long, hop step, jump	52ft.5 $\frac{1}{2}$ in.(16m.)	Naoto Tajima	Japan	Berlin	Aug. 6, 1936
Pole vault	15ft.7 $\frac{1}{2}$ in.	C. Warmerdam	United States	Modesto, Calif.	May 23, 1942
15-lb. shot put	57ft.1in.(17.40m.)	Jack Torrance	United States	Oslo	Aug. 5, 1934
Discus throw	175ft.	Adolfo Consolini	Italy	Milan	Oct. 26, 1941
Javelin throw	258ft.2 $\frac{3}{4}$ in.(78.70m.)	Yrjo Nikkanen	Finland	Kotka	Oct. 16, 1938
15-lb. hammer throw	193ft.6 $\frac{1}{2}$ in.(59m.)	Erwin Blask	Germany	Stockholm	Aug. 27, 1938

WOMEN'S WORLD RECORDS

Recognized by the International Amateur Athletic Federation, December 1945

RUNNING

Event	Record	Holder	Country	Where made	Date
100 yd.	10.8s.	F. E. Blankers-Koen	Netherlands	Amsterdam	May 18, 1944
200 yd.	24.3s.	Stella Walasiewicz	Poland	Cleveland, Ohio	June 9, 1935
300 yd.	2m.19.7s.	Olive Mary Hall	Great Britain	Mitcham	Aug. 27, 1938
400 yd.	2m.19.7s.	Stella Walasiewicz	Poland	Lemberg	Sept. 24, 1933
500 yd.	7.3s.	Helen Stephens	United States	Berlin	Aug. 4, 1936
100 m.	11.5s.	Stella Walasiewicz	Poland	Warsaw	Aug. 15, 1935
200 m.	23.6s.	Anna Larsson	Sweden	Stockholm	Aug. 30, 1945
400 m.	2m.13.8s.				

RELAY RACES

40 yd. (4x110)	48.8s.	Netherlands Nat'l Team	Netherlands	Amsterdam	May 18, 1944
		(Blankers-Koen, Adema, Timmer, Koudys)			
100 m. (4x100)	46.4s.	National Team	Germany	Berlin	Aug. 8, 1936
		(Albus, Krauss, Dollinger, Dorfheidt)			
200 m. (4x200)	1m.41s.	Netherlands Nat'l Team	Netherlands	Hilversum	Aug. 27, 1944
		(Sluyters, Blankers-Koen, Timmer, Koudys)			
2,400 m. (3x800)	7m.15.8s.	French National Team	France	Paris	Oct. 3, 1943
		(Delepine, Loubet, Doufour)			

HURDLES

		Claudia Testoni	Italy	Garmisch-Partenkirchen, Germany	July 23, 1939
80 m.	11.3s.	Claudia Testoni	Italy	Dresden, Germany	Aug. 13, 1939
		F. E. Blankers-Koen	Netherlands	Amsterdam	Sept. 20, 1942

FIELD EVENTS

Long, high jump	1.71m.	F. E. Blankers-Koen	Netherlands	Amsterdam	May 30, 1943
Broad jump	6.25m.	F. E. Blankers-Koen	Netherlands	Leiden	Sept. 19, 1943
Shot put	14.38m.	Gisela Mauermayer	Germany	Warsaw	July 15, 1934
Discus throw	48.31m.	Gisela Mauermayer	Germany	Dresden	July 11, 1936
Javelin throw	47.24m.	Annelise Steinheuer	Germany	Frankfurt	June 21, 1942

PENTATHLON

418 points		Gisela Mauermayer	Germany	Stuttgart	July 16-17, 1938
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Dodgers-Reds Set Scoreless Mark

Rune Gustafsson of Sweden broke the world record for 1000 meters at Boras, Sweden, on Sept. 4, 1946. His time of 2:21.4 surpassed the old standard, made by Rudolf Harbig of Germany, by one-tenth of a second. Harbig set his record at Dresden on May 24, 1941. However, Gustafsson's mark will not be entered in the record books until it has been officially passed at a meeting of the ruling body of the sport, the International Amateur Athletic Federation.

On Sept. 11, 1946, the Brooklyn Dodgers and the Cincinnati Reds set a major league record by playing nineteen scoreless innings, the longest game without a run being scored by either team in the history of the two circuits. The contest was called on account of darkness. Vander Meer pitched fifteen innings for the Reds, and then was relieved by Gumbert. The Dodger hurlers were Gregg, who went ten innings, Casey, Herring and Behrman.

History of the Mile Run

Year	Athlete and country	Where made	Time
1865	Webster, England	England	4:44.3
1866	C. B. Lawes, England	England	4:39
1868	W. M. Chinnery, England	England	4:33.2
1871	W. M. Chinnery, England	England	4:31.8
1874	Walter Slade, England	England	4:24.5
1881	Walter George, England	England	4:19.8
1884	Walter George, England	England	4:18.4
1895	F. E. Bacon, England	England	4:17
1895	T. P. Conneff, United States	United States	4:15.6
1911	John Paul Jones, United States	United States	4:15.4
1913	John Paul Jones, United States	United States	4:14.4
1915	Norman Taber, United States	United States	4:12.6
1923	Paavo Nurmi, Finland	Sweden	4:10.4
1931	Jules Ladoumegue, France	France	4:09.2
1933	John Lovelock, New Zealand	United States	4:07.6
1934	Glenn Cunningham, United States	United States	4:06.8
1937	Sydney Wooderson, England	England	4:06.4
1942	Gunder Hagg, Sweden	Sweden	4:06.2
1942	Gunder Hagg, Sweden	Sweden	4:04.6
1943	Arne Andersson, Sweden	Sweden	4:02.6
1944	Arne Andersson, Sweden	Sweden	4:01.6
1945	*Gunder Hagg, Sweden	Sweden	4:01.4

*In March 1946, Hagg and Andersson were declared professionals by the Swedish Athletic Association and barred from amateur competition for life.

James E. Sullivan Memorial Award Winners

Given annually to the amateur athlete voted by sports leaders as having done the most to advance the cause of sportsmanship.

Year	Winner	From	Sport
1930	Robert T. Jones, Jr.	Atlanta, Ga.	Golf
1931	Bernard E. Berlinger	Philadelphia	All-around athletics
1932	James A. Bausch	Kansas City, Mo.	All-around athletics
1933	Glenn Cunningham	University of Kansas	Middle-distance running
1934	William R. Bonthron	New York A. C.	Middle-distance running
1935	W. Lawson Little, Jr.	California	Golf
1936	Glenn Morris	Denver A. C.	All-around athletics
1937	J. Donald Budge	Oakland, Calif.	Tennis
1938	Donald R. Lash	Indiana State Police	Distance running
1939	Joseph W. Burk	Penn. A. C., Philadelphia	Rowing
1940	J. Gregory Rice	South Bend A. A., Ind.	Distance running
1941	Leslie MacMillan	New York University	Middle-distance running
1942	Cornelius Warmerdam	San Francisco Olympic Club	Pole vaulting
1943	Gilbert L. Dadds	Boston Athletic Ass'n.	Middle-distance running
1944	Ann Curtis	Crystal Plunge S. C., San Francisco	Swimming
1945	Felix (Doc) Blanchard	U. S. Military Academy	Football

European Track and Field Championships, 1946

(Held at Oslo, Norway, Aug. 22-25)

TRACK EVENTS

Event	Winner and country	Time
100 m.—John Archer, Great Britain		:10.6
200 m.—Karakulov, Russia		:21.6
400 m.—Neils Holst-Soerensen, Denmark		:47.9
800 m.—Rune Gustafsson, Sweden		1:51
1500 m.—Lennart Strand, Sweden		3:48
5000 m.—Sydney Wooderson, England		14:08.6
10,000 m.—Viljo Heino, Finland		29:52
110-m. hurdles—Haakon Lidman, Sweden		:14.6
400-m. hurdles—Storskrubb, Finland		:52.2
3000-m. steeplechase—Raphall Pujazow, France		9:01.4
400-m. relay—Sweden		:41.5
1600-m. relay—France		3:14.4

Event	Winner and country	Time
41-km. marathon—N. Hitanen, Finland		2:24:55
Decathlon—Thor Holmvang, Norway		6,987 pts.
10,000-m. walk—John Mikaelsson, Sweden		46:05.1
50-km. walk—E. L. Junggren, Sweden		4:38:20

FIELD EVENTS

		Meters
Pole vault—Allan Lindberg, Sweden		4.17
Broad jump—Ole Laessker, Sweden		7.42
Hammer throw—Bo Ericsson, Sweden		56.44
High jump—S. Bofinder, Sweden		1.99
Javelin—Lennart Atterwall, Sweden		68.40
Shot-put—P. Huseby, Iceland		15.56
Discus—Adolfo Consolini, Italy		53.23

SWIMMING

HERE IS THE ancient tale of Leander of Abydos swimming the Hellespont nightly to call on Helen of Sestos but nobody kept the time on his trips. However, Lord Byron wrote of one leg of the old Leander course, Sestos to Abydos, on May 3, 1810, in 1 hour 10 minutes. The famous British poet was a noted swimmer and once, in an endurance trial at Venice, was in the water for 10 hours 10 minutes. Distance swimming was the early type of competition. Captain Matthew Webb achieved fame by being the first to swim the English Channel—Dover to Calais—in August, 1875, in 21 hours 45 minutes. Many other swimmers, men and women, have conquered the Channel since

that time. Gertrude Ederle, of New York City, was the first woman to accomplish the feat. Miss Ederle swam the Channel Aug. 6, 1926, in 14 hours 34 minutes, breaking the existing record at that time. Since then the record has been lowered by four or five men.

Regular competition at short as well as long distances and indoor as well as outdoor came with the development of such organizations as the Amateur Athletic Union and the building of indoor and outdoor swimming pools. Swimming has been on the Olympic program since the start of the modern Olympic Games at Athens in 1896.

Swimming Statistics

Source: *Official Amateur Athletic Union Swimming Rules and Records Book*. Reprinted by courtesy of the publishers, the Amateur Athletic Union of the United States, 233 Broadway, New York, N. Y., and R. M. Ritter, Secretary-Treasurer, International Amateur Swimming Federation.

WORLD RECORDS

Accepted by the International Amateur Swimming Federation as of June 20, 1946.

Men FREE STYLE

Distance	Time	Course	Holder	Country	Where made	Date
100 yd.	49.7 s.	25 yd.	Alan Ford	U. S.	New Haven, Conn.	Mar. 18, 1944
100 m.	55.9 s.	25 m.	Alan Ford	U. S.	New Haven.	Apr. 13, 1944
200 m.	2m. 6.2 s.	25 yd.	W. Smith	U. S.	Columbus, Ohio.	Feb. 12, 1944
200 yd.	2m. 7.1 s.	25 yd.	W. Smith	U. S.	Columbus.	Feb. 12, 1944
300 yd.	3m. 4.4 s.	25 yd.	J. Medica	U. S.	Chicago.	Apr. 10, 1935
300 m.	3 m. 21.6 s.	25 yd.	J. Medica	U. S.	Chicago.	Apr. 11, 1935
400 m.	4 m. 38.5 s.	25 yd.	W. Smith	U. S.	Honolulu.	Apr. 16, 1941
400 yd.	4 m. 38.5 s.	25 yd.	W. Smith	U. S.	Honolulu.	May 13, 1941
500 yd.	5 m. 16.3 s.	25 yd.	J. Medica	U. S.	New York.	Apr. 6, 1935
500 m.	5 m. 56.5 s.	25 yd.*	R. Flanagan	U. S.	Miami, Fla.	Apr. 3, 1939
600 m.	9 m. 50.9 s.	110 yd.*	W. Smith	U. S.	Honolulu.	July 24, 1941
680 yd.	9 m. 54.6 s.	55 yd.*	W. Smith	U. S.	New London, Conn.	Aug. 10, 1942
1,000 yd.	11 m. 37.4 s.	55 yd.	J. Medica	U. S.	Portland, Oregon.	July 29, 1933
1,000 m.	12 m. 33.8 s.	50 m.	F. Amano	Japan	Tokyo.	Aug. 10, 1938
1,500 m.	18 m. 58.8 s.	50 m.	F. Amano	Japan	Tokyo.	Aug. 10, 1938
1 mi.	20 m. 29 s.	55 yd.*	K. Nakama	U. S.	New London.	Aug. 8, 1942
400-yd. relay	3 m. 24.5 s.	25 yd.	Great Lakes N.T.S.	U. S.	Columbus.	Feb. 12, 1944
			(J. Kerschner, W. Ris, D. Burton, W. Smith)			
400-m. relay	3 m. 50.8 s.	25 m.	Yale University	U. S.	New Haven, Conn.	Mar. 18, 1942
			(H. Johnson, R. Kelly, E. Pope, F. Lilley)			
800-yd. relay	8 m. 24.3 s.	50 yd.	Yale University	U. S.	New Haven, Conn.	June 9, 1936
			(P. Brueckel, R. Cooke, J. Macionis, N. Hoyt)			
800-m. relay	8 m. 51.5 s.	50 m.	National Team	Japan	Berlin.	Aug. 11, 1936
			(C. M. Yusa, S. H. Sugiura, Th. Arai, M. Taguchi)			

*Salt water.

BREAST STROKE

100 yd.	1 m. 6 s.	25 yd.	R. Hough	U. S.	New Haven.	Apr. 15, 1939
100 m.	1 m. 7.3 s.	25 m.	R. Hough	U. S.	New Haven.	Apr. 15, 1939
200 yd.	2 m. 19.5 s.	25 yd.	J. Verdeur	U. S.	Bainbridge, Md.	Apr. 5, 1946
200 m.	2 m. 35.6 s.	25 yd.	J. Verdeur	U. S.	Bainbridge.	Apr. 5, 1946
400 m.	5 m. 43.8 s.	25 m.	A. Heina	Germany	Copenhagen.	Feb. 10, 1938
500 m.	7 m. 13 s.	25 m.	A. Heina	Germany	Solingen.	May 7, 1939

BACKSTROKE

100 yd.	56.8 s.	25 yd.	A. Kiefer	U. S.	Annapolis, Md.	Feb. 26, 1944
100 m.	1 m. 4.8 s.	25 yd.	A. Kiefer	U. S.	Detroit.	Jan. 18, 1936
150 yd.	1 m. 30.4 s.	25 yd.	A. Kiefer	U. S.	Honolulu.	May 24, 1941
200 m.	2 m. 19.3 s.	25 yd.	A. Kiefer	U. S.	Annapolis.	May 4, 1944
400 m.	5 m. 10.9 s.	25 yd.	A. Kiefer	U. S.	Cincinnati.	Mar. 15, 1941

Women FREE STYLE

Distance	Time	Course	Holder	Country	Where made	Date
100 yd.	59.4 s.	25 m.*	F. Nathansen	Denmark	Aarhus	Apr. 27, 1944
100 m.	1 m. 46 s.	25 m.	W. Den Ouden	Holland	Amsterdam	Feb. 27, 1936
200 m.	2 m. 21.7 s.	25 m.	R. Hveger	Denmark	Aarhus	Sept. 11, 1938
220 yd.	2 m. 22.6 s.	25 yd.*	R. Hveger	Denmark	Copenhagen	Apr. 23, 1939
300 yd.	3 m. 25. 6 s.	25 yd.*	R. Hveger	Denmark	Copenhagen	Oct. 2, 1938
300 m.	3 m. 42.5 s.	25 m.	R. Hveger	Denmark	Copenhagen	Sept. 15, 1940
400 m.	5 m. 1 s.	25 m.	R. Hveger	Denmark	Copenhagen	Sept. 15, 1940
440 yd.	5 m. 11.5 s.	25 m.	R. Hveger	Denmark	Copenhagen	Mar. 15, 1942
500 yd.	5 m. 53 s.	25 m.	R. Hveger	Denmark	Copenhagen	Apr. 19, 1942
500 m.	6 m. 27.4 s.	25 m.	R. Hveger	Denmark	Copenhagen	Feb. 11, 1940
800 m.	10 m. 52.5 s.	50 m.*	R. Hveger	Denmark	Copenhagen	Aug. 13, 1941
880 yd.	11 m. 8.6 s.	50 yd.*	Ann Curtis	U. S.	San Francisco	July 30, 1944
1,000 yd.	12 m. 36 s.	50 m.*	R. Hveger	Denmark	Helsingoer	Sept. 4, 1938
1,000 m.	13 m. 54.4 s.	50 m.*	R. Hveger	Denmark	Copenhagen	Aug. 20, 1941
1,500 m.	20 m. 57 s.	50 m.*	R. Hveger	Denmark	Copenhagen	Aug. 20, 1941
1 mi.	23 m. 11.5 s.	50 m.*	R. Hveger	Denmark	Helsingoer	July 3, 1938
400-yd. relay	4 m. 5.7 s.	25 yd.*	National Team	Denmark	Copenhagen	Apr. 11, 1943
(F. Nathansen, K. O. Petersen, B. O. Petersen, K. M. Harup)						
400-m. relay	4 m. 27.6 s.	25 m.	National Team	Denmark	Copenhagen	Aug. 7, 1938
(E. Arndt, G. Kraft, B. O. Petersen, R. Hveger)						

*Salt water.

BREAST STROKE

100 yd.	1 m. 13 s.	25 m.	A. Styl	Holland	Amsterdam	Jan. 12, 1940
100 m.	1 m. 19.8 s.	25 m.	G. Grass	Germany	Leipzig	May 9, 1943
200 yd.	2 m. 40.3 s.	25 m.	J. Waalberg	Holland	Amsterdam	July 11, 1939
200 m.	2 m. 56 s.	25 m.	M. Lenk	Brazil	Rio de Janeiro	Nov. 8, 1939
400 m.	6 m. 13.7 s.	25 m.	J. Waalberg	Holland	Amsterdam	Nov. 12, 1940
500 m.	7 m. 49.9 s.	25 m.	J. Waalberg	Holland	Amsterdam	Nov. 5, 1940

BACKSTROKE

100 yd.	1 m. 51.1 s.	25 m.	Cor Kint	Holland	Rotterdam	Sept. 8, 1939
100 m.	1 m. 10.9 s.	25 m.	Cor Kint	Holland	Rotterdam	Sept. 22, 1939
150 yd.	1 m. 42.1 s.	25 m.	Cor Kint	Holland	Rotterdam	Sept. 29, 1939
200 m.	2 m. 38.8 s.	25 m.	Cor Kint	Holland	Rotterdam	Nov. 26, 1939
400 m.	5 m. 38.2 s.	25 m.	R. Hveger	Denmark	Copenhagen	Mar. 2, 1941

BASEBALL'S HALL OF FAME

Those named to the Hall of Fame and Honor Rolls in 1946 follow:

HALL OF FAME

Jesse Burkett, Frank Chance, John Chesbro, John J. Evers, Clark Griffith, Tom McCarthy, Joseph McGinnity, Eddie Plank, Joseph Tinker, Edward (Rube) Waddell, and Ed Walsh.

HONOR ROLLS

Executives—E. S. Barnard, Edward G. Barrow, John Bruce, John T. Brush, Barney Dreyfus, Charles Ebbets, August Herrmann, John A. Heydler, J. A. (Bob) Quinn, Arthur H. Soden, Nicholas Young.

Managers—William Carrigan, Edward Hanlon, Miller J. Huggins, Frank Seeley, John M. Ward.

Umpires—Thomas Connolly, William Dinneen, Robert Emslie, William Evans, John Gaffney, Timothy Hurst, Honest John Kelly, William Klem, Thomas Lynch, Silk O'Loughlin, and Jack Sheridan.

Writers—Walter Barnes, Harry E. Cross, William Hanna, Frank Hough, Sid Mercer, T. H. Murnane, Frank Richter, Cy Sanborn, John B. Sheridan, William Slocum, George Tidden, and Joe Villa.

NAMED PRIOR TO 1946

Grover C. Alexander, Adrian C. Anson, Dan Brouthers, Roger Bresnahan, Morgan G. Bulkeley, Alexander J. Cartwright, Henry Chadwick, Fred Clarke, Ty Cobb, Eddy Collins, Jimmy Collins, Charles A. Comiskey, William A. Cummings, Ed Delahanty, Hugh Duffy, Buck Ewing, Lou Gehrig, Rogers Hornsby, Hughie Jennings, B. Bancroft Johnson, Walter Johnson, Willie Keeler, Mike Kelly, Napoleon Lajoie, Judge Kenesaw M. Landis, John J. McGraw, Connie Mack, Christy Mathewson, James O'Rourke, Charles G. Radbourne, Wilbert Robinson, Babe Ruth, George Sisler, Albert G. Spalding, Tris Speaker, Hans Wagner, George Wright, and Cy Young.

OLYMPIC GAMES CHAMPIONS

Source: American Olympic Association.

1906—Athens, Greece	1906—Athens, Greece	1920—Antwerp, Belgium	1932—Los Angeles, California
1900—Paris, France	1908—London, England	1924—Paris, France	1936—Berlin, Germany
1904—St. Louis, Missouri	1912—Stockholm, Sweden	1928—Amsterdam, Holland	1948—Scheduled for London

TRACK AND FIELD—MEN

60-Meter Run

1900 A. E. Kraenzlein, United States	7s.
1904 Archie Hahn, United States	7s.

100-Meter Run

1906 T. E. Burke, United States	12s.
1900 F. W. Jarvis, United States	10.8s.
1904 Archie Hahn, United States	11s.
1906 Archie Hahn, United States	11.2s.
1908 R. E. Walker, South Africa	10.8s.
1912 R. C. Craig, United States	10.8s.
1916 C. W. Paddock, United States	10.8s.
1920 H. M. Abrahams, Great Britain	10.6s.
1924 Percy Williams, Canada	10.8s.
1928 Eddie Tolan, United States	10.3s.
1932 Jesse Owens, United States	10.3s.*
With the wind.	

200-Meter Run

1900 J. W. B. Tewksbury, United States	22.2s.
1904 Archie Hahn, United States	21.6s.
1908 R. Kerr, Canada	22.4s.
1912 R. C. Craig, United States	21.7s.
1916 Allan Woodring, United States	22s.
1920 J. V. Scholz, United States	21.6s.
1924 Percy Williams, Canada	21.8s.
1928 Eddie Tolan, United States	21.2s.
1932 Jesse Owens, United States	20.7s.

400-Meter Run

1906 T. E. Burke, United States	54.2s.
1900 M. W. Long, United States	49.4s.
1904 H. L. Hillman, United States	49.2s.
1906 Paul Pilgrim, United States	53.2s.
1908 W. Halswelle, Great Britain (walkover)	50s.
1912 C. D. Reidpath, United States	48.2s.
1916 B. G. D. Rudd, South Africa	49.6s.
1920 E. H. Liddell, Great Britain	47.6s.
1924 Ray Barbuti, United States	47.8s.
1928 William Carr, United States	46.2s.
1932 Archie Williams, United States	46.5s.

800-Meter Run

1906 E. H. Flack, Great Britain	2m.11s.
1900 A. E. Tysoe, Great Britain	2m.1.4s.
1904 J. D. Lightbody, United States	1m.56s.
1906 Paul Pilgrim, United States	2m.1.2s.
1908 M. W. Sheppard, United States	1m.52.8s.
1912 J. E. Meredith, United States	1m.51.9s.
1916 A. G. Hill, Great Britain	1m.53.4s.
1920 D. G. A. Lowe, Great Britain	1m.52.4s.
1924 D. G. A. Lowe, Great Britain	1m.51.8s.
1928 Thomas Hampson, Great Britain	1m.49.8s.
1932 John Woodruff, United States	1m.52.9s.

1,500-Meter Run

1906 E. H. Flack, Great Britain	4m.33.2s.
1900 C. Bennett, Great Britain	4m.6s.
1904 J. D. Lightbody, United States	4m.5.4s.
1906 J. D. Lightbody, United States	4m.12s.
1908 M. W. Sheppard, United States	4m.3.4s.
1912 A. N. S. Jackson, Great Britain	3m.56.8s.
1916 A. G. Hill, Great Britain	4m.1.8s.
1920 Paavo Nurmi, Finland	3m.53.6s.
1924 H. E. Larva, Finland	3m.53.2s.
1928 Luigi Beccali, Italy	3m.51.2s.
1932 J. E. Lovelock, New Zealand	3m.47.8s.

5,000-Meter Run

1912 H. Kolehmainen, Finland	14m.36.6s.
1920 J. Guillemot, France	14m.55.6s.
1924 Paavo Nurmi, Finland	14m.31.2s.
1928 Willie Ritola, Finland	14m.38s.
1932 Lauri Lehtinen, Finland	14m.30s.
1936 Gunnar Hockert, Finland	14m.22.2s.

5-Mile Run

1906 H. Hawtrey, Great Britain	26m.26.2s.
1908 E. R. Voigt, Great Britain	25m.11.2s.

10,000-Meter Run

1912 H. Kolehmainen, Finland	31m.20.8s.
1920 Paavo Nurmi, Finland	31m.45.8s.
1924 Willie Ritola, Finland	30m.23.2s.
1928 Paavo Nurmi, Finland	30m.18.8s.
1932 Janusz Kusocinski, Poland	30m.11.4s.
1936 Ilmari Salminen, Finland	30m.15.4s.

Marathon

1896 S. Loues, Greece	2h.55m.20s.
1900 Teato, France	2h.59m.
1904 T. J. Hicks, United States	3h.28m.53s.
1906 W. J. Sherring, Canada	2h.51m.23.6s.
1908 John J. Hayes, United States	2h.55m.18.4s.
1912 K. K. McArthur, South Africa	2h.32m.35.8s.
1920 H. Kolehmainen, Finland	2h.32m.35.8s.
1924 A. O. Stenroos, Finland	2h.41m.22.6s.
1928 El Ouafi, France	2h.32m.57s.
1932 Juan Zabala, Argentina	2h.31m.36s.
1936 Kitei Son, Japan	2h.29m.19.2s.

110-Meter Hurdles

1896 Curtis, United States	17.6s.
1900 A. E. Kraenzlein, United States	15.4s.
1904 F. W. Schule, United States	16s.
1906 R. G. Leavitt, United States	16.2s.
1908 Forrest Smithson, United States	15s.
1912 F. W. Kelly, United States	15.1s.
1920 E. J. Thomson, Canada	14.8s.
1924 D. C. Kinsey, United States	15s.
1928 S. Atkinson, South Africa	14.8s.
1932 George Saling, United States	14.6s.
1936 Forrest Towns, United States	14.2s.

200-Meter Hurdles

1900 A. E. Kraenzlein, United States	25.4s.
1904 H. L. Hillman, United States	24.6s.

400-Meter Hurdles

1900 J. W. B. Tewksbury, United States	57.6s.
1904 H. L. Hillman, United States	53s.
1908 C. J. Bacon, United States	55s.
1920 F. F. Loomis, United States	54s.
1924 F. M. Taylor, United States	52.6s.*
1928 Lord David Burghley, Great Britain	53.4s.
1932 Robert Tisdall, Ireland	51.8s.*
1936 Glenn Hardin, United States	52.4s.

*Record not allowed.

2,500-Meter Steeplechase

1900 G. W. Orton, United States.....	7m.34s.
1904 J. D. Lightbody, United States.....	7m.39.6s.

3,000-Meter Steeplechase

1920 P. Hodge, Great Britain.....	10m.2.4s.
1924 Willie Ritola, Finland.....	9m.33.6s.
1928 T. A. Loukola, Finland.....	9m.21.8s.
1932 Volmari Iso-Hollo, Finland.....	10m.33.4s.
(About 3,450 Meters—extra lap by error)	
1936 Volmari Iso-Hollo, Finland.....	9m.3.8s.

3,200-Meter Steeplechase

1908 A. Russell, Great Britain.....	10m.47.8s.
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4,000-Meter Steeplechase

1900 C. Rimmer, Great Britain.....	12m.58.4s.
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3,000-Meter Team

1912 United States.....	9 pts.
1920 United States.....	10 pts.
1924 Finland.....	8 pts.

3-Mile Team

1908 Great Britain.....	6 pts.
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8,000-Meter X-Country

1912 H. Kolehmainen, Finland.....	45m.11.6s.
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8,000-Meter X-Country Team

1912 Sweden.....	
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10,000-Meter X-Country

1920 Paavo Nurmi, Finland.....	27m.15s.
1924 Paavo Nurmi, Finland.....	32m.54.8s.

10,000-Meter X-Country Team

1912 Sweden.....	10 pts.
1920 Finland.....	10 pts.
1924 Finland.....	11 pts.

1,500-Meter Walk

1906 George V. Bonhag, United States.....	7m.12.6s.
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3,000-Meter Walk

1906 G. Stantics, Hungary.....	Time not taken
1920 Ugo Frigerio, Italy.....	13m.14.2s

3,500-Meter Walk

1908 G. E. Larner, Great Britain.....	14m.55s.
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10,000-Meter Walk

1912 G. H. Goulding, Canada.....	46m.28.4s.
1920 Ugo Frigerio, Italy.....	48m.6.2s.
1924 Ugo Frigerio, Italy.....	47m.49s

10-Mile Walk

1908 G. E. Larner, Great Britain.....	1h.15m.57.4s.
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50,000-Meter Walk

1932 Thomas W. Green, Great Britain.....	4h.50m.10s.
1936 Harold Whitlock, Great Britain.....	4h.30m.41.4s.

400-Meter Relay

1912 Great Britain.....	42.4s.
1920 United States.....	42.2s.
1924 United States.....	41s.
1928 United States.....	41s.
1932 United States.....	40s.
1936 United States.....	39.8s.

1,600-Meter Relay

1908 United States.....	3m.27.2s.
1912 United States.....	3m.16.6s.
1920 Great Britain.....	3m.22.2s.
1924 United States.....	3m.16s.
1928 United States.....	3m.14.2s.
1932 United States.....	3m.8.2s.
1936 Great Britain.....	3m.9s.

Pole Vault

1896 W. W. Hoyt, United States.....	10ft.9¾in.
1900 I. K. Baxter, United States.....	10ft.9.9in.
1904 C. E. Dvorak, United States.....	11ft.6in.
1906 Gonder, France.....	11ft.6in.
1908 A. C. Gilbert, United States.....	12ft.2in.
E. T. Cook, Jr., United States.....	
1912 H. J. Babcock, United States.....	12ft.11½in.
1920 F. K. Foss, United States.....	13ft.5in.
1924 L. S. Barnes, United States.....	12ft.11½in.
1928 Sabin W. Carr, United States.....	13ft.9¾in.
1932 William Miller, United States.....	14ft.1½in.
1936 Earle Meadows, United States.....	14ft.3¼in.

Standing High Jump

1900 R. C. Ewry, United States.....	5ft.5in.
1904 R. C. Ewry, United States.....	4ft.11in.
1906 R. C. Ewry, United States.....	5ft.1½in.
1908 R. C. Ewry, United States.....	5ft.2in.
1912 Platt Adams, United States.....	5ft.4¼in.

Running High Jump

1896 E. H. Clark, United States.....	5ft.11¼in.
1900 I. K. Baxter, United States.....	6ft.2 ¾in.
1904 S. S. Jones, United States.....	5ft.11in.
1906 Con Leahy, Ireland.....	5ft.9¾in.
1908 H. F. Porter, United States.....	6ft.3in.
1912 A. W. Richards, United States.....	6 ft. 4in.
1920 R. W. Landon, United States.....	6ft.4¼in.
1924 H. M. Osborn, United States.....	6ft.5¾in.
1928 Robert W. King, United States.....	6ft.4¾in.
1932 Duncan McNaughton, Canada.....	6ft.5¾in.
1936 Cornelius Johnson, United States.....	6ft.7¾in.

Standing Broad Jump

1900 R. C. Ewry, United States.....	10ft.6 ¾in.
1904 R. C. Ewry, United States.....	11ft.4¾in.
1906 R. C. Ewry, United States.....	10ft.10in.
1908 R. C. Ewry, United States.....	10ft.11¼in.
1912 C. Tsicilitiras, Greece.....	11ft.¼in.

A first-class sprinter does sufficient work to lift himself 240 to 270 feet in the air in running 100 yards. He will bring into play approximately eight horsepower and attain his maximum speed at 60 to 70 yards from the start, when he may be traveling as fast as 24 miles an hour.—*Encyc. Brit.*

When Loues, a Greek peasant, won the first Olympic marathon, his reception was so great that women threw jewelry at his feet.—*Encyc. Brit.*

Running Broad Jump

E. H. Clark, United States.....	20ft.9 $\frac{1}{2}$ in.
A. E. Kraenzlein, United States.....	23ft.6 $\frac{1}{2}$ in.
Myer Prinstein, United States.....	24ft.1in.
Myer Prinstein, United States.....	23ft.7 $\frac{1}{2}$ in.
Frank Irons, United States.....	24ft.6 $\frac{1}{2}$ in.
A. L. Gutterson, United States.....	24ft.11 $\frac{1}{4}$ in.
Wm. Pettersson, Sweden.....	23ft.5 $\frac{1}{2}$ in.
DeHart Hubbard, United States.....	24ft.5 $\frac{1}{2}$ in.
Edward B. Hamm, United States.....	25ft.4 $\frac{1}{2}$ in.
Edward Gordon, United States.....	25ft.3 $\frac{1}{2}$ in.
Jesse Owens, United States.....	26ft.5 $\frac{1}{2}$ in.

Standing Hop, Step, and Jump

R. C. Ewry, United States.....	34ft.8 $\frac{1}{2}$ in.
R. C. Ewry, United States.....	34ft.7 $\frac{1}{2}$ in.

Running Hop, Step, and Jump

J. B. Connolly, United States.....	45ft.
Myer Prinstein, United States.....	47ft.4 $\frac{1}{4}$ in.
Myer Prinstein, United States.....	47ft.
P. O'Connor, Ireland.....	46ft.2in.
T. J. Ahearne, Great Britain.....	48ft.11 $\frac{1}{4}$ in.
G. Lindblom, Sweden.....	48ft.5 $\frac{1}{2}$ in.
V. Tuulos, Finland.....	47ft.6 $\frac{1}{2}$ in.
A. W. Winter, Australia.....	50ft.11 $\frac{1}{2}$ in.
Mikio Oda, Japan.....	49ft.10 $\frac{1}{2}$ in.
Chuheji Nambu, Japan.....	51ft.7in.
Naoto Tajima, Japan.....	52ft.5 $\frac{1}{2}$ in.

16-Lb. Shot-put

R. S. Garrett, United States.....	36ft.2in.
R. Sheldon, United States.....	46ft.3 $\frac{1}{2}$ in.
Ralph Rose, United States.....	48ft.7in.
M. J. Sheridan, United States.....	40ft.4 $\frac{1}{2}$ in.
Ralph Rose, United States.....	46ft.7 $\frac{1}{2}$ in.
P. J. McDonald, United States.....	50ft.4in.
V. Porhola, Finland.....	48ft.7 $\frac{1}{2}$ in.
Clarence Houser, United States.....	49ft.2 $\frac{1}{2}$ in.
John Kuck, United States.....	52ft.1 $\frac{1}{2}$ in.
Leo Sexton, United States.....	52ft.6 $\frac{1}{2}$ in.
Hans Woellke, Germany.....	53ft.1 $\frac{3}{4}$ in.

16-Lb. Shot-put (Both Hands)

Ralph Rose, United States.....	90ft.5 $\frac{1}{2}$ in.
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16-Lb. Hammer Throw

J. J. Flanagan, United States.....	167ft.4in.
J. J. Flanagan, United States.....	168ft.1in.
J. J. Flanagan, United States.....	170ft.4 $\frac{1}{2}$ in.
M. J. McGrath, United States.....	177ft.7in.
P. J. Ryan, United States.....	173ft.5 $\frac{1}{2}$ in.
F. D. Tootell, United States.....	174ft.10 $\frac{1}{4}$ in.
Patrick O'Callaghan, Ireland.....	168ft.7 $\frac{1}{2}$ in.
Patrick O'Callaghan, Ireland.....	176ft.11 $\frac{1}{2}$ in.
Karl Hein, Germany.....	185ft.4in.

56-Lb. Weight Throw

E. Desmarteau, Canada.....	34ft.4in.
P. J. McDonald, United States.....	36ft.11 $\frac{1}{2}$ in.

Discus Throw

R. S. Garrett, United States.....	95ft.7 $\frac{1}{2}$ in.
R. Bauer, Hungary.....	118ft.2.9in.
M. J. Sheridan, United States.....	128ft.10 $\frac{1}{2}$ in.
M. J. Sheridan, United States.....	136ft.3 $\frac{1}{2}$ in.
M. J. Sheridan, United States.....	134ft.2in.
A. R. Taipale, Finland.....	148ft.3.9in.
E. Niklander, Finland.....	146ft.7in.
Clarence Houser, United States.....	151ft.5 $\frac{1}{4}$ in.
Clarence Houser, United States.....	155ft.2 $\frac{1}{2}$ in.
John Anderson, United States.....	162ft.4 $\frac{1}{2}$ in.
Ken Carpenter, United States.....	165ft.7 $\frac{1}{2}$ in.

Discus Throw—Greek Style

W. Jaervinen, Finland.....	115ft.4in.
M. J. Sheridan, United States.....	124ft.8in.

Discus Throw (Right and Left Hand)

A. R. Taipale, Finland.....	271ft.10 $\frac{1}{2}$ in.
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Javelin Throw

E. Lemming, Sweden.....	175ft.6in.
E. Lemming, Sweden.....	179ft.10 $\frac{1}{2}$ in.
E. Lemming, Sweden.....	198ft.11 $\frac{1}{4}$ in.
Jonni Myyra, Finland.....	215ft.9 $\frac{1}{2}$ in.
Jonni Myyra, Finland.....	206ft.6 $\frac{1}{2}$ in.
E. H. Lundquist, Sweden.....	218ft.6 $\frac{1}{2}$ in.
Matti Jarvinen, Finland.....	238ft.7in.
Gerhard Stoock, Germany.....	235ft.8 $\frac{3}{4}$ in.

Javelin Throw (Free Style)

E. V. Lemming, Sweden.....	178ft.7 $\frac{1}{2}$ in.
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Javelin Throw (Both Hands)

J. J. Saaristo, Finland.....	358ft.11 $\frac{1}{2}$ in.
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Pentathlon

H. Mellander, Sweden.....	24 pts.
F. R. Bie, Norway.....	21 pts.
E. R. Lehtonen, Finland.....	14 pts.
E. R. Lehtonen, Finland.....	16 pts.

Decathlon

H. Wieslander, Sweden.....	7,724.495 pts.
H. Lovland, Norway.....	6,804.35 pts.
H. M. Osborn, United States.....	7,710.775 pts.
Paavo Yrjola, Finland.....	8,053.29 pts.
James Bausch, United States.....	8,462.23 pts.
Glenn Morris, United States.....	7,900 pts.
(Old point system used from 1912 to 1932; new point system used in 1936.)	

TRACK AND FIELD—WOMEN

100-Meter Run

Elizabeth Robinson, United States.....	12.2s.
Stanislawa Walasiewicz, Poland.....	11.9s.
Helen Stephens, United States.....	11.5s.

800-Meter Run

Lina Radke, Germany.....	2m.16.8s.
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80-Meter Hurdles

Mildred Didrikson, United States.....	11.7s.
Trebisonda Valla, Italy.....	11.7s.

400-Meter Relay

1928 Canada	48.4s.
1932 United States	47s.
1936 United States	46.9s.

Running High Jump

1928 Ethel Catherwood, Canada	5ft.3in.
1932 Jean Shiley, United States	5ft.5 $\frac{1}{4}$ in.
1936 Ibolya Csak, Hungary	5ft.3in.

SWIMMING—MEN**50 Yards**

1904 Zoltan de Halomay, Hungary	28s.
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100 Meters

1896 Alfred Hajos, Hungary	1m.22.2s.
1904 Zoltan de Halomay, Hungary	1m.2.8s.*
1906 C. M. Daniels, United States	1m.13s.
1908 C. M. Daniels, United States	1m.5.6s.
1912 Duke P. Kahanamoku, United States	1m.3.4s.
1920 Duke P. Kahanamoku, United States	1m.1.4s.
1924 John Weissmuller, United States	59s.
1928 John Weissmuller, United States	58.6s.
1932 Yasuji Miyazaki, Japan	58.2s.
1936 Ferenc Csik, Hungary	57.6s.
*100 yards	

220 Yards

1900 F. C. V. Lane, Australia	
1904 C. M. Daniels, United States	2m.44.2s.

400 Meters

1904 C. M. Daniels, United States	6m.16.2s.*
1906 Otto Sheff, Austria	6m.23.8s.
1908 H. Taylor, Great Britain	5m.36.8s.
1912 G. R. Hodgson, Canada	5m.24.4s.
1920 N. Ross, United States	5m.26.8s.
1924 John Weissmuller, United States	5m.4.2s.
1928 Albert Zorilla, Argentina	5m.1.6s.
1932 Clarence Crabbe, United States	4m.48.4s.
1936 Jack Medica, United States	4m.44.5s.
*440 yards	

500 Meters

1896 Paul Neumann, Austria	
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880 Yards

1904 Emil Rausch, Germany	13m.11.4s.
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1,000 Meters

1900 Jarvis, Great Britain	
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1,200 Meters

1896 Alfred Hajos, Hungary	
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1,500 Meters

1908 H. Taylor, Great Britain	22m.48.4s.
1912 G. R. Hodgson, Canada	22m.
1920 N. Ross, United States	22m.23.2s.
1924 A. M. Charlton, Australia	20m.6.6s.
1928 Arne Borg, Sweden	19m.51.8s.
1932 Kusuo Kitamura, Japan	19m.12.4s.
1936 Noboru Terada, Japan	19m.13.7s.

1,600 Meters

1906 H. Taylor, Great Britain	28m.28s.
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Discus Throw

1928 H. Konopacka, Poland	129ft.11 $\frac{1}{2}$ in.
1932 Lillian Copeland, United States	133ft.2in.
1936 Gisela Mauermayer, Germany	156ft.3 $\frac{3}{4}$ in.

Javelin Throw

1932 Mildred Didrikson, United States	143ft.4in.
1936 Tilly Fleischer, Germany	148ft.2 $\frac{1}{2}$ in.

One Mile

1904 Emil Rausch, Germany	27m.18.2s*
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Plunge for Distance

1904 W. E. Dickey, United States	62ft.6in.
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800-Meter Relay

1908 Great Britain	10m.55.6s.
1912 Australia	10m.11.6s.
1920 United States	10m.4.4s.
1924 United States	9m.53.4s.
1928 United States	9m.36.2s.
1932 Japan	8m.58.4s.
1936 Japan	8m.51.5s.

100-Meter Backstroke

1904 Walter Brack, Germany	1m.16.8s.*
1908 Arno Bieberstein, Germany	1m.24.6s.
1912 Harry Hebner, United States	1m.21.2s.
1920 Warren Kealoha, United States	1m.15.2s.
1924 Warren Kealoha, United States	1m.13.2s.
1928 George Kojac, United States	1m.8.2s.
1932 Masaji Kiyokawa, Japan	1m.8.6s.
1936 Adolph Kiefer, United States	1m.5.9s.
*100 yards	

200-Meter Breast Stroke

1908 F. Holman, Great Britain	3m.9.2s.
1912 Walter Bathe, Germany	3m.1.8s.
1920 H. Malmroth, Sweden	3m.4.4s.
1924 R. D. Skelton, United States	2m.56.6s.
1928 Y. Tsuruta, Japan	2m.48.8s.
1932 Yoshiyuki Tsuruta, Japan	2m.45.4s.
1936 Tetsuo Hamuro, Japan	2m.42.5s.

400-Meter Breast Stroke

1904 Georg Zacharias, Germany	7m.23.6s.
1920 H. Malmroth, Sweden	6m.31.8s.

1,000-Meter Team Race

1906 Hungary	17m.16.2s.
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Water Polo

1900 Great Britain	
1904 United States	
1908 Great Britain defeated Belgium	
1912 Great Britain defeated Austria	
1920 Great Britain defeated Belgium	
1924 France defeated Belgium	
1928 Germany defeated Hungary	
1932 Hungary defeated Germany	
1936 Hungary	

Springboard Diving

	Points
G. E. Sheldon, United States.....	12 2-3
Gottlob Walz, Germany.....	85.5
Albert Zuerner, Germany.....	6
Paul Guenther, Germany.....	6
L. E. Kuehn, United States.....	7
A. C. White, United States.....	185.04
P. Desjardins, United States.....	161.38
Michael Galitzen, United States.....	163.57
Richard Degener, United States.....	

Fancy High Diving

	Points
Eric Adlerz, Sweden.....	7
C. E. Pinkston, United States.....	7
A. C. White, United States.....	9

Plain High Diving

	Points
H. Johanssen, Sweden.....	83.70
Erik Adlerz, Sweden.....	7
Arvid Wallman, Sweden.....	7
Richard Eve, Australia.....	13½

Plain and Fancy High Diving

	Points
P. Desjardins, United States.....	98.74
Harold Smith, United States.....	124.80
Marshall Wayne, United States.....	113.58

SWIMMING—WOMEN

100 Meters

1	Fanny Durack, Australia.....	1m.22.2s.
2	Ethelda Bleibtrey, United States.....	1m.13.6s.
3	Ethel Lackie, United States.....	1m.12.4s.
4	Albina Osipowich, United States.....	1m.11s.
5	Helene Madison, United States.....	1m.6.8s.
6	Hendrika Mastenbroek, Holland.....	1m.5.9s.

300 Meters

1	Ethelda Bleibtrey, United States.....	4m.34s.
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400 Meters

1	Martha Norelius, United States.....	6m.2.2s.
2	Martha Norelius, United States.....	5m.42.8s.
3	Helene Madison, United States.....	5m.28.5s.
4	Hendrika Mastenbroek, Holland.....	5m.26.4s.

400-Meter Relay

1	Great Britain.....	5m.52.8s.
2	United States.....	5m.11.6s.
3	United States.....	4m.58.8s.
4	United States.....	4m.47.6s.
5	United States.....	4m.38s.
6	Holland.....	4m.36s.

100-Meter Backstroke

1	Sybil Bauer, United States.....	1m.23.2s.
2	Marie Braun, Holland.....	1m.22s.
3	Eleanor Holm, United States.....	1m.19.4s.
4	Dina Senff, Holland.....	1m.18.9s.

200-Meter Breast Stroke

1	Lucy Morton, Great Britain.....	3m.33.2s.
2	Hilde Schrader, Germany.....	3m.12.6s.
3	Clare Dennis, Australia.....	3m.6.3s.
4	Hideko Maehata, Japan.....	3m.3.6s.

Plain High Diving

	Points
1912 Greta Johansson, Sweden.....	39.9
1920 Miss Fryland, Denmark.....	6
1924 Caroline Smith, United States.....	9

Fancy Springboard Diving

	Points
1920 Aileen Riggan, United States.....	9
1924 Elizabeth Becker, United States.....	8
1928 Helen Meagy, United States.....	78.62
1932 Georgia Coleman, United States.....	87.52
1936 Marjorie Gestring, United States.....	89.27

Plain and Fancy High Diving

	Points
1928 Elizabeth B. Pinkston, United States.....	31.60
1932 Dorothy Poynton, United States.....	40.26
1936 Mrs. Dorothy Poynton Hill, United States.....	33.93

FIGURE SKATING

Men

	Points
1924 Gillis Grafstroem, Sweden.....	2,575.25
1928 Gillis Grafstroem, Sweden.....	2,698.25
1932 Karl Schafer, Austria.....	2,602.00
1936 Karl Schafer, Austria.....	2,959.00

Women

	Points
1924 Mrs. H. Szabo-Planck, Austria.....	2,094.25
1928 Sonja Henie, Norway.....	2,452.25
1932 Sonja Henie, Norway.....	2,302.5
1936 Sonja Henie, Norway.....	2,971.4

Pairs

	Points
1924 H. Engelmann and A. Berger, Austria.....	74.5
1928 Andree Joly and Pierre Brunet, France.....	78.2
1932 Andree Brunet and Pierre Brunet, France.....	76.7
1936 Maxie Herber and Ernst Baier, Germany.....	103.3

BOBSLEDDING

Four-Man

1924 Switzerland (Capt. Scherrer).....	5m.45.54s.
1928 United States (Capt. Fiske).....	3m.20.5s.
1932 United States (Capt. Fiske).....	7m.53.68s.
1936 Switzerland (Capt. Pierre Musy).....	5m.19.85s.

Two-Man

1932 United States (Capt. J. H. Stevens).....	8m.14.74s.
1936 United States (Capt. Ivan Brown).....	5m.29.29s.

Skeleton

1928 John Heaton, United States.....	3m.1.8s.
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SITES OF WINTER GAMES

1924—Chamonix, France	1932—Lake Placid, New York
1928—St. Moritz, Switzerland	1936—Garmisch-Partenkirchen
1948—Listed for St. Moritz	

1948 Olympic Games Dates

Dates for the 1948 Summer and Winter Olympic Games have been set. The Summer program, most of which will be held in the Wembley Stadium, London, will start July 29 and continue through Aug. 14. The Winter Games are scheduled for St. Moritz, and will run from Feb. 1 to 10.

BOXING**Flyweight**

- 1904 George V. Finnegan, United States (105-lb. class)
- 1920 Frank De Genero, United States
- 1924 Fidel La Barba, United States
- 1928 Anton Kocsis, Hungary
- 1932 Stephen Enekes, Hungary
- 1936 Willi Kaiser, Germany

Bantamweight

- 1904 O. L. Kirk, United States (115-lb. class)
- 1908 H. Thomas, Great Britain
- 1920 Walker, South Africa
- 1924 W. H. Smith, South Africa
- 1928 Vittorio Tamagnini, Italy
- 1932 Horace Gwynne, Canada
- 1936 Ulderico Sergo, Italy

Featherweight

- 1904 O. L. Kirk, United States
- 1908 R. K. Gunn, Great Britain
- 1920 Fritsch, France
- 1924 John Fields, United States
- 1928 L. Van Klaveren, Holland
- 1932 Carmelo Ambrosio Robledo, Argentina
- 1936 Oscar Casanovas, Argentina

Lightweight

- 1904 H. J. Spanger, United States
- 1908 F. Grace, Great Britain
- 1920 Samuel Mosberg, United States
- 1924 Harold Nielsen, Denmark
- 1928 Carlo Orlandi, Italy
- 1932 Lawrence Stevens, South Africa
- 1936 Imre Harangi, Hungary

CATCH-AS-CATCH-CAN**Flyweight**

- 1904 R. Curry, United States (105-lb. class)

Bantamweight

- 1904 George N. Mehnert, United States (115-lb. class)
- 1908 George N. Mehnert, United States (119-lb. class)
- 1924 Kustaa Pihlajamaki, Finland
- 1928 K. Makinen, Finland
- 1932 Robert Edward Pearce, United States
- 1936 Odon Zombory, Hungary

Featherweight

- 1896 Karl Schumann, Germany
- 1904 I. Niflot, United States
- 1908 G. S. Dole, United States
- 1920 Charles E. Ackerly, United States
- 1924 Robin Reed, United States
- 1928 Allie Morrison, United States
- 1932 Herman Pihlajamaki, Finland
- 1936 Kustaa Pihlajamaki, Finland

Lightweight

- 1904 B. J. Bradshaw, United States
- 1908 G. de Relwyskow, Great Britain
- 1920 Kalle Antilla, Finland
- 1924 Russell Vis, United States
- 1928 O. Kapp, Esthonia
- 1932 Charles Pacome, France
- 1936 Karoly Karpati, Hungary

Welterweight

- 1904 Al Young, United States
- 1920 Schneider, Canada
- 1924 J. S. Delarge, Belgium
- 1928 Edward Morgan, New Zealand
- 1932 Edward Flynn, United States
- 1936 Sten Suvio, Finland

Middleweight

- 1904 Charles Mayer, United States
- 1908 J. W. H. T. Douglas, Great Britain
- 1920 H. W. Mallin, Great Britain
- 1924 H. W. Mallin, Great Britain
- 1928 Piero Toscani, Italy
- 1932 Carmen Barth, United States
- 1936 Jean Despeaux, France

Light Heavyweight

- 1920 Edward Eagan, United States
- 1924 H. J. Mitchell, Great Britain
- 1928 Victoria Avendano, Argentina
- 1932 David E. Carstens, South Africa
- 1936 Roger Michelot, France

Heavyweight

- 1904 Sam Berger, United States
- 1908 A. L. Oldham, Great Britain
- 1920 Rawson, Great Britain
- 1924 Otto Von Porath, Norway
- 1928 A. Rodriguez Jurado, Argentina
- 1932 Santiago A. Lovell, Argentina
- 1936 Herbert Runge, Germany

WRESTLING**Welterweight**

- 1904 O. F. Roehm, United States
- 1924 Hermann Gehri, Switzerland
- 1928 A. J. Haavisto, Finland
- 1932 Jack F. Van Bebber, United States
- 1936 Frank Lewis, United States

Middleweight

- 1904 Charles Erickson, United States
- 1908 S. V. Bacon, Great Britain
- 1920 E. Leino, Finland
- 1924 Fritz Haggmann, Switzerland
- 1928 E. Kyburg, Switzerland
- 1932 Ivar Johansson, Sweden
- 1936 Emile Poilve, France

Light Heavyweight

- 1920 Anders Larsson, Sweden
- 1924 John Spellman, United States
- 1928 T. S. Sjostedt, Sweden
- 1932 Peter Joseph Mehringer, United States
- 1936 Knut Fridell, Sweden

Heavyweight

- 1904 B. Hansen, United States
- 1908 G. C. O'Kelly, Great Britain
- 1920 Roth, Switzerland
- 1924 Harry Steele, United States
- 1928 Johan C. Richthoff, Sweden
- 1932 Johan C. Richthoff, Sweden
- 1936 Kristjan Palusalu, Esthonia

ROWING

Eight-Oared Shell

United States	
United States	
Great Britain	
Great Britain	6m.15s.
United States	6m.23½s.
United States	6m.33½s.
United States	6m.33½s.
United States	6m.37½s.
United States	6m.25.4s.

Single Sculls

Barrelett, Belgium	
Frank B. Greer, United States	
H. T. Blackstaffe, Great Britain	
W. D. Kinear, Great Britain	7m.47½s.
J. B. Kelly, United States	7m.35s.
Jack Beresford, Jr., Great Britain	7m.49½s.
Henry Robert Pearce, Australia	7m.11s.
Henry Robert Pearce, Australia	7m.44½s.
Gustav Schaffer, Germany	8m.21.5s.

Double Sculls

United States	
J. R. K. Fenning and G. L. Thomson, Great Britain	
J. B. Kelly and Paul V. Costello, United States	7m.9s.
J. B. Kelly and Paul V. Costello, United States	6m.34s.
Paul V. Costello and Charles J. McIlvaine, United States	6m.41½s.
Kenneth Myers and W. E. Garrett Gilmore, United States	7m.17½s.
Jack Beresford and Leslie Southwood, Great Britain	7m.20.8s.

Four-Oared Shell with Coxswain

1900 Germany	
1906 Italy	
1912 Germany	6m.59½s.
1920 Switzerland	6m.54s.
1924 Switzerland	7m.18½s.
1928 Italy	6m.47½s.
1932 Germany	7m.19½s.
1936 Germany	7m.16.2s.

Four-Oared Shell Without Coxswain

1904 United States	
1908 Great Britain	
1924 Great Britain	
1928 Great Britain	6m.36s.
1932 Great Britain	6m.58½s.
1936 Germany	7m.1.8s.

Pair-Oared Shell with Coxswain

1900 Holland	
1906 Italy (1,600 Meters)	
1906 Italy (1,000 Meters)	
1920 M. Olgeni and G. Scatturin, Italy	7m.56s.
1924 M. Candevau and A. Felber, Switzerland	8m.39s.
1928 H. W. Schochlin and C. F. Schochlin, Switzerland	7m.42½s.
1932 Joseph A. Schauers and Charles M. Kieffer, United States	8m.25½s.
1936 Gerhard Gustmann and Herbert Adamski, Germany	8m.36.9s.

Pair-Oared Shell Without Coxswain

1904 United States	10m.57s.
1908 J. Fenning and G. Thomson, Great Britain	9m.41s.
1924 W. H. Rosingh and A. C. Beynen, Holland	8m.19½s.
1928 K. Moeschter and B. Muller, Germany	7m.6½s.
1932 Lewis Clive and H. R. Arthur Edwards, Great Britain	8m.
1936 Willi Eichhorn and Hugo Strauss, Germany	8m.16.1s.

LAWN TENNIS

Men's Singles

06 Boland, Ireland
4 Beals C. Wright, United States
6 M. Decugis, France
8 M. J. G. Ritchie, Great Britain
2 C. L. Winslow, South Africa
0 L. Raymond, South Africa
4 Vincent Richards, United States

Ladies' Singles

06 Miss Semyriotou, Greece
08 Mrs. Lambert Chambers, Great Britain
12 Mlle. M. Broquedis, France
20 Mlle. S. Lenglen, France
24 Miss Helen Wills, United States

Men's Doubles

1896 Boland, Great Britain, and Traun, Germany
1904 E. W. Leonard and Beals C. Wright, United States
1906 M. Decugis and M. Germot, France
1908 G. W. Hillyard and R. F. Doherty, Great Britain
1912 H. A. Kitson and C. Winslow, South Africa
1920 O. Turnbull and M. Woosnam, Great Britain
1924 Vincent Richards and F. T. Hunter, United States

Ladies' Doubles

1920 Mrs. J. McNair and Miss K. McKane, Great Britain
1924 Miss Helen Wills and Mrs. G. W. Wightman, United States

Mixed Doubles

1906 M. and Mme. Decugis, France
1912 Miss D. Koring and H. Schomburgk, Germany
1920 M. Decugis and Mlle. S. Lenglen, France
1924 Mrs. G. Wightman and R. N. Williams, United States

EQUESTRIAN

Points

12 G. Lilliehook, Sweden	27
20 J. Dyrssen, Sweden	18
24 O. Lindman, Sweden	19
28 S. A. Thofelt, Sweden	47
32 John G. Oxenstierna, Sweden	32
36 Gotthardt Handrick, Germany	31.5

POLO

1900 Great Britain	1924 Argentina
1908 Great Britain	1936 Argentina
1920 Great Britain	

BASKETBALL

1904 United States	1936 United States
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SKIING**18 Kilometers**

1924 Thorleif Haug, Norway.....	1h.14m.31s.
1928 Johan Grottnumsbraaten, Norway.....	1h.37m.1s.
1932 Sven L. Utterstrom, Sweden.....	1h.23m.7s.
1936 Erik-Aug. Larsson, Sweden.....	1h.14m.38s.

50 Kilometers

1924 Thorleif Haug, Norway.....	3h.44m.32s.
1928 P. E. Hedlund, Sweden.....	4h.52m.3s.
1932 Veli Saarinen, Finland.....	4h.28m.
1936 Elis Viklund, Sweden.....	3h.30m.11s.

Ski Jump

	Points
1924 Jacob T. Thams, Norway.....	18.96
1928 Alfred Anderson, Norway.....	19.208
1932 Birger Ruud, Norway.....	228.1
1936 Birger Ruud, Norway.....	232

Combined 18-Km. Race and Jump

	Points
1924 Thorleif Haug, Norway.....	18.906
1928 Johan Grottnumsbraaten, Norway.....	17.833
1932 Johan Grottnumsbraaten, Norway.....	446
1936 Oddbjorn Hagen, Norway.....	430.3

30-Km. Military Ski Race

1924 Switzerland.....	3h.56m.6s.
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40-Km. Ski Relay Race

1936 Finland.....	2h.41m.33s.
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Women's Combined Downhill and Slalom

	Points
1936 Christel Cranz, Germany.....	97.06

Men's Combined Downhill and Slalom

	Points
1936 Franz Pfner, Germany.....	99.25

SPEED SKATING**500 Meters**

1924 Charles Jewtraw.....	44s.
1928 Clas Thunberg, Finland, and Bernt Evensen, Norway (tie).....	43.4s.
1932 John A. Shea, United States.....	43.4s.
1936 Ivar Ballangrud, Norway.....	43.4s.

1,500 Meters

1924 Clas Thunberg, Finland.....	2m.20.8s.
1928 Clas Thunberg, Finland.....	2m.21.1s.
1932 John A. Shea, United States.....	2m.57.5s.
1936 Charles Mathisen, Norway.....	2m.19.2s.

5,000 Meters

1924 Clas Thunberg, Finland.....	8m.39s.
1928 Ivar Ballangrud, Norway.....	8m.50.5s.
1932 Irving Jaffee, United States.....	9m.40.8s.
1936 Ivar Ballangrud, Norway.....	8m.19.6s.

10,000 Meters

1924 Julien Skutnabb, Finland.....	18m.4.8s.
1928 Irving Jaffee, United States.....	18m.36.5s.
(Jaffee made best time but, on account of thawing of ice, race was cancelled)	
1932 Irving Jaffee, United States.....	19m.13.6s.
1936 Ivar Ballangrud, Norway.....	17m.24.3s.

ICE HOCKEY

1924 Canada	1932 Canada
1928 Canada	1936 Great Britain

The Story of the Olympic Games

THE first Olympic Games of which there is record occurred in 776 B. C. and consisted of one event, a great foot race of about 200 yards held on a plain by the River Alpheus (now the Ruphia) just outside the little town of Olympia in Greece. It was from that date that the Greeks began to keep their calendar by "Olympiads," the four-year spans between the celebrations of the famous games. There was a religious as well as an athletic significance to the ancient games and the shrines, temples and sacred fires within the Olympic enclosure were the scenes of worship all through the year whereas the Olympic Games, at the height of their popularity, never lasted more than five days and were held only once every four years.

The competition was entirely amateur at the start and the only prizes were laurel wreaths. Only free Greek citizens were allowed to compete and they had to undergo a strict training course that lasted ten months. But civic rivalry led to trickery and professionalism and the

games became degraded after some centuries. When Rome conquered Greece, the Roman emperors turned the Olympic Games from patriotic, religious and athletic festivals into carnivals and circuses. They dragged on malodorously until they were finally halted by decree of Emperor Theodosius I of Rome in 394 A. D.

The modern Olympic Games, which started in Athens in 1896, are the result of the devotion of a French educator, Baron Pierre de Coubertin, to the idea that, since boys and athletics have gone together down the ages, education and athletics might well go hand-in-hand toward a better international understanding. He planned a revival of the ancient Olympic Games on a world-wide basis and succeeded in getting nine nations to send athletes to the first of the modern games in 1896. Since then more than 5,000 athletes representing 53 nations have competed in the games.

Interrupted for the second time by war, the modern Olympic Games will be resumed at London in 1948.

CYCLING

THE ORIGIN and early history of the sport of cycling probably should be sought in the law volumes that contain the court records of decisions in patent cases. There is much dispute and litigation over the priority of inventions and improvements in the development of the bicycle. The fundamental idea of a wheeled frame on which a man could stand or sit and propel himself along a road goes back as far as the time of the Ptolemies in Egypt, but nothing progressive was done about it until a Frenchman named de Sivrac, in 1690, invented a tricycle on which he sat and rolled along by pushing his feet against the ground. There were various two-wheeled and three-wheeled improvements developed by French, German and English experimenters in the next century or so. The frames were better; steering with the front wheel was a new feature; handlebars were a more convenient design and adjustable seats were added. But the rider still pushed himself along with his feet until, about 1800, somebody had the bright idea of equipping the front wheel with a geared device, the rider furnishing the power by

pushing and pulling handlebars mounted on a spindle. Pedals came along about 1840 and, in the case of bicycles, were attached to the front wheel that grew to be much larger than the rear wheel. Solid rubber tires replaced iron tires in 1868.

There was a long legal dispute about credit for the invention of the "safety bicycle" with two wheels of equal size and pedals attached to a sprocket that, through gears and a chain, applied power to the rear wheel but, in any case, the "safety" or modern bicycle had just about driven the old "high-wheeler" off the roads by 1890. Pneumatic tires were invented in 1888 by J. B. Dunlop, a Scotsman who was a practising veterinarian in Belfast, Ireland, and in a few years all the better bicycles were using pneumatic tires. But when Dunlop tried to patent his invention, it was discovered that a stranger named R. W. Thomson had taken out an English patent on such an idea in 1845. The Pickwick Bicycle Club, founded in London, 1870, was the first bicycle organization. The League of American Wheelmen was organized in 1880.

Cycling Statistics

Source: Amateur Bicycle League of America, Inc.

NATIONAL AMATEUR CHAMPIONS

Winner	Where held	Year	Winner	Where held
Arthur Nieminsky, New York	Washington, D. C.	1930	Bobby Thomas, Wisconsin	Kenosha, Wis.
Carl Hambacher, New Jersey	Atlantic City	1935	Bobby Hursey, Georgia	Atlantic City
Charles Barclay, California	Chicago	1936	Jackie Simes, New Jersey	St. Louis
Charlie Winter, New York	Buffalo	1937	Charles Bergna, New Jersey	Buffalo
Edward Merkner, Illinois	St. Louis	1939	Martin Deras, California	Columbus
Edward Merkner, Illinois	Philadelphia	1940	Furman Kugler, New Jersey	Detroit
Jimmy Walthour, Jr., New York	Louisville	1941	Marvin Thomas, Illinois	Pasadena, Calif.
R. J. Connor, District of Columbia	Kenosha, Wis.	1945	Ted Smith, New York	Chicago
Sergio Matteini, New York	Newark, N. J.	1946	Don Hester, California	Columbus

National Amateur Championships, 1946

(Held at Columbus, Ohio, Aug. 16-18)

LEADING FINISHERS

Senior	Junior	Girls
Don Hester	1. Don Sheldon	1. Mildred Dietz
Jack Heid	2. Percy Murnane	2. Janice Delhougne
Ted Smith	3. Clayton Meade	3. Peggy Barber

The International Cycle Union world championship, held at Zurich, Switzerland, in 1946, was taken by Henri Aubry of

France. Aubry covered the 189 kilometers (approximately 118 miles) in five hours, 12 minutes and 41 seconds.

AMATEUR BICYCLE LEAGUE OF AMERICA RECORDS

Source: George Knopf, Chairman, Records Committee, A.B.L.A.

ROAD COMPETITION—SCRATCH

Distance, mi.	Time	Record-holder and where made	Date
$\frac{1}{4}$	:29 $\frac{3}{4}$	B. W. King, Atlantic City, N. J.	Sept. 16, 1922
$\frac{1}{8}$	:38 $\frac{3}{4}$	Charles Winters, Chicago, Ill.	Sept. 8, 1923
$\frac{1}{2}$	1:04 $\frac{3}{4}$	John Leahy, Louisville, Ky.	Sept. 11, 1923
1	2:02	Henry Surman..... R. L. Guthridge..... S. C. Haberle..... Westfield, N. J.	Aug. 8, 1908
2	4:46 $\frac{1}{2}$	Theodore Becker, Louisville, Ky.	Sept. 10, 1927
3	8:23 $\frac{3}{4}$	Jackie W. Simes, Jr., Washington, D. C.	Oct. 11, 1936
15	48:40 $\frac{3}{4}$	Jackie W. Simes, Jr., Washington, D. C.	Oct. 11, 1936
20	45:22	A. E. Wahl, Buffalo, N. Y.	July 4, 1921
25	1:02:14	Charles R. Thomas, Tonawanda, N. Y.	Sept. 6, 1937
50	2:02:00	Leo Adams, Buffalo, N. Y.	July 14, 1935
100	4:33:25 $\frac{1}{2}$	Louis Maltese, Union City, N. J., to South Philadelphia, Pa.	June 6, 1926

DISTANCE AGAINST TIME

Hours	Distance, mi.	Record-holder and where made	Date
1	23.2	Theodore Krohner, Farmington, Conn.	Oct. 22, 1939
2	42.2	George L. Thorpe, San Francisco, Calif.	Aug. 20, 1944
3	62.2	George L. Thorpe, San Francisco, Calif.	Aug. 20, 1944
5	102.6	August Nogora, Washington, D. C.	July 3, 1921
6	109.2*	Thomas Smeriglio, Freeport, N. Y.	Oct. 24, 1943
7	125.2*	Thomas Smeriglio, Freeport, N. Y.	Oct. 24, 1943
8	141.8*	Thomas Smeriglio, Freeport, N. Y.	Oct. 24, 1943
9	157.2*	Thomas Smeriglio, Freeport, N. Y.	Oct. 24, 1943
10	173.7*	Thomas Smeriglio, Freeport, N. Y.	Oct. 24, 1943
11	191 *	Thomas Smeriglio, Freeport, N. Y.	Oct. 24, 1943
12	204.2*	Thomas Smeriglio, Freeport, N. Y.	Oct. 24, 1943

*Made on a flat macadam track.

International and National Skeet Champions

Sub gauge and professional events were not fired because of lack of shells.

MEN

Champion of champions—Charles Poulton, San Antonio, Texas, 100x100.

All gauge—Alex Kerr, Beverly Hills, Calif., 250x250.

Twenty gauge—D. Lee Braun, Austin, Texas, 100x100.

Small gauge—D. Lee Braun, 96x100.

High Over-all—Gerald Batten, Chicago, 347x350 (shoot-off, 100x100).

2-man team—Charles Poulton and D. Lee Braun, 494x500.

5-man team—Capitol City Gun Club (Dave Arnette, George Heaney, Dick Hecker, Loren Booker, L. S. Pratt), Indianapolis, 1210x1250.

Junior (under 17)—Joe Devers, Dayton, Ohio, 98x100.

Sub-junior (under 13)—John Ragsdale, Jr., Mooresville, Ind., 46x100.

Father and son—M. O. Devers and Joe Devers, Dayton, Ohio, 483x500.

WOMEN

All gauge—Mrs. J. A. Lafore, Haverford, Pa., 235x250.

Twenty gauge—Mrs. J. A. Lafore, 91x100.

Small gauge—Mrs. M. L. Smythe, Palm Beach, Fla., 88x100.

High Over-all—Mrs. J. A. Lafore, 326x350.

CROQUET

More than 50,000 spectators, the largest crowd in the history of golf, attended the final day's play of the annual All-American professional championship at the Tam O'Shanter Country Club, Chicago, last year. First prize of \$10,500 went to Herman Baron of the Fenway Country Club, White Plains, N. Y., who finished with a score of 280.

The world croquet championship was held at Roehampton, England, in 1946. D. J. V. Hamilton-Miller, London schoolmaster, capturing the title after an extended 8 hour and 10 minute match with Dr. H. J. Penny of Australia. The marathon performance was witnessed by 27 (sic) spectators.

LAWN TENNIS

LAWN TENNIS is a comparatively modern modification of the ancient game of court tennis. Major Walter Clopton Wingfield thought that something like court tennis might be played outdoors on lawns and in December, 1873, at Nantclwyd, Wales, introduced his new game under the name of "Sphairistike" at a lawn party. The game was a success and spread rapidly, but the name was a total failure and soon immediately disappeared when all players and spectators began to refer to the new game as "lawn tennis". In the early part of 1874 a young lady named Mary Ewing Outerbridge returned from Bermuda to New York, bringing with her implements and necessary equipment for the new game that she had obtained from a British Army supply store in Bermuda. Miss Outerbridge and friends played the first game of lawn tennis in the United States on the grounds of the Staten Island

Cricket and Baseball Club in the spring of 1874.

For a few years the new game went along in haphazard fashion under varying rules. Tennis balls were of no standard size or texture. The nets were set at different heights up to 5 feet on the side and 4 feet in the middle. Some courts were marked out in hour-glass shape, narrow in the middle and wide at both ends. But about 1880 standard measurements for the court and standard equipment within definite limits became the rule. In 1881 the United States Lawn Tennis Association was formed and conducted the first national championship at Newport, R. I. The international matches for the Davis Cup began with a series between the British and United States players on the courts of the Longwood Cricket Club, Chestnut Hill, Mass., in 1900, with the home players winning.

Lawn Tennis Statistics

Source: *The Official Tennis Guide*; published by A. S. Barnes & Company.

DAVIS CUP CHALLENGE ROUND RESULTS

MEN

matches in 1901, 1910, 1915-18, and 1940-45.

Result	Where played	Year	Result	Where played
United States, 5, British Isles, 0	Chestnut Hill	1923	United States, 4, Australasia, 1	Forest Hills
United States, 3, British Isles, 2	Brooklyn	1924	United States, 5, Australasia, 0	Philadelphia
British Isles, 4, United States, 1	Chestnut Hill	1925	United States, 5, France, 0	Philadelphia
British Isles, 5, Belgium, 0	Wimbledon	1926	United States, 4, France, 1	Philadelphia
British Isles, 5, United States, 0	Wimbledon	1927	France, 3, United States, 2	Philadelphia
British Isles, 5, United States, 0	Wimbledon	1928	France, 4, United States, 1	Paris
Australasia 3, British Isles, 2	Wimbledon	1929	France, 3, United States, 2	Paris
Australasia, 3, United States, 2	Melbourne	1930	France, 4, United States, 1	Paris
Australasia 5, United States, 0	Sydney	1931	France, 3, Great Britain, 2	Paris
Australasia, 5, United States 0	Christchurch	1932	France, 3, United States, 2	Paris
British Isles, 3, Australasia, 2	Melbourne	1933	Great Britain, 3, France, 2	Paris
United States, 3, British Isles, 2	Wimbledon	1934	Great Britain, 4, United States, 1	Wimbledon
Australasia, 3, United States, 2	Forest Hills	1935	Great Britain, 5, United States, 0	Wimbledon
Australasia 4, British Isles, 1	Sydney	1936	Great Britain, 3, Australia, 2	Wimbledon
United States, 5, Australasia, 0	Auckland	1937	United States, 4, Great Britain, 1	Wimbledon
United States 5, Japan, 0	Forest Hills	1938	United States, 3, Australia, 2	Philadelphia
United States, 4, Australasia, 1	Forest Hills	1939	Australia, 3, United States, 2	Haverford

WIGHTMAN CUP RECORD

WOMEN

Result	Where played	Year	Result	Where played
United States, 7, England, 0	Forest Hills	1933	United States 4, England 3	Forest Hills
England, 6, United States, 1	Wimbledon	1934	United States 5, England 2	Wimbledon
England, 4, United States, 3	Forest Hills	1935	United States 4, England 3	Forest Hills
United States 4, England 3	Wimbledon	1936	United States 4, England 3	Wimbledon
United States 5, England 2	Forest Hills	1937	United States 6, England 1	Forest Hills
England 4, United States 3	Wimbledon	1938	United States 5, England 2	Wimbledon
United States 4, England 3	Forest Hills	1939	United States 5, England 2	Forest Hills
England 4, United States 3	Wimbledon	1940-45	No matches	
United States 5, England 2	Forest Hills	1946	United States 7, England 0	Wimbledon
United States 4, England 3	Wimbledon			

UNITED STATES CHAMPIONS

Men's Singles

1881 Richard D. Sears	1903 Hugh L. Doherty	1925 William T. Tilden, II
1882 Richard D. Sears	1904 Holcombe Ward	1926 Jean Rene Lacoste
1883 Richard D. Sears	1905 Beals C. Wright	1927 Jean Rene Lacoste
1884 Richard D. Sears	1906 William J. Clothier	1928 Henri Cochet
1885 Richard D. Sears	1907 William A. Larned	1929 William T. Tilden, II
1886 Richard D. Sears	1908 William A. Larned	1930 John H. Doeg
1887 Richard D. Sears	1909 William A. Larned	1931 H. Ellsworth Vines, Jr.
1888 Henry W. Slocum, Jr.	1910 William A. Larned	1932 H. Ellsworth Vines, Jr.
1889 Henry W. Slocum, Jr.	1911 William A. Larned	1933 Fred J. Perry
1890 Oliver S. Campbell	1912 Maurice E. McLoughlin*	1934 Fred J. Perry
1891 Oliver S. Campbell	1913 Maurice E. McLoughlin	1935 Wilmer L. Allison
1892 Oliver S. Campbell	1914 R. N. Williams, II	1936 Fred J. Perry
1893 Robert D. Wrenn	1915 William Johnston	1937 J. Donald Budge
1894 Robert D. Wrenn	1916 R. N. Williams, II	1938 J. Donald Budge
1895 Fred H. Hovey	1917 R. Lindley Murray†	1939 Robert L. Riggs
1896 Robert D. Wrenn	1918 R. Lindley Murray	1940 Donald McNeill
1897 Robert D. Wrenn	1919 William Johnston	1941 Robert L. Riggs
1898 Malcolm D. Whitman	1920 William T. Tilden, II	1942 Frederick R. Schroeder, Jr.
1899 Malcolm D. Whitman	1921 William T. Tilden, II	1943 Lt. (jg) Joseph R. Hunt
1900 Malcolm D. Whitman	1922 William T. Tilden, II	1944 Sgt. Frank A. Parker
1901 William A. Larned	1923 William T. Tilden, II	1945 Sgt. Frank A. Parker
1902 William A. Larned	1924 William T. Tilden, II	1946 John Kramer

*Challenge round abandoned. †Patriotic tourney.

Men's Doubles

1881 C. M. Clark—F. W. Taylor	1914 M. E. McLoughlin—T. C. Bundy
1882 R. D. Sears—James Dwight	1915 William Johnston—C. J. Griffin
1883 R. D. Sears—James Dwight	1916 William Johnston—C. J. Griffin
1884 R. D. Sears—James Dwight	1917 F. B. Alexander—H. A. Throckmorton*
1885 R. D. Sears—J. S. Clark	1918 W. T. Tilden, II—Vincent Richards†
1886 R. D. Sears—James Dwight	1919 N. E. Brookes—G. L. Patterson
1887 R. D. Sears—James Dwight	1920 William Johnston—C. J. Griffin
1888 O. S. Campbell—V. G. Hall	1921 W. T. Tilden, II—Vincent Richards
1889 H. W. Slocum, Jr.—H. A. Taylor	1922 W. T. Tilden, II—Vincent Richards
1890 V. G. Hall—Clarence Hobart	1923 W. T. Tilden, II—B. I. C. Norton
1891 O. S. Campbell—R. P. Huntington, Jr.	1924 H. O. Kinsey—R. G. Kinsey
1892 O. S. Campbell—R. P. Huntington, Jr.	1925 Vincent Richards—R. N. Williams, II
1893 Clarence Hobart—F. H. Hovey	1926 Vincent Richards—R. N. Williams, II
1894 Clarence Hobart—F. H. Hovey	1927 W. T. Tilden, II—F. T. Hunter
1895 M. G. Chace—R. D. Wrenn	1928 G. M. Lott, Jr.—J. F. Hennessey
1896 C. B. Neel—S. R. Neel	1929 G. M. Lott, Jr.—J. H. Doeg
1897 L. E. Ware—G. P. Sheldon, Jr.	1930 G. M. Lott, Jr.—J. H. Doeg
1898 L. E. Ware—G. P. Sheldon, Jr.	1931 W. L. Allison—John Van Ryn
1899 Holcombe Ward—D. F. Davis	1932 H. E. Vines, Jr.—Keith Gledhill
1900 Holcombe Ward—D. F. Davis	1933 G. M. Lott, Jr.—L. R. Stoeften
1901 Holcombe Ward—D. F. Davis	1934 G. M. Lott, Jr.—L. R. Stoeften
1902 R. F. Doherty—H. L. Doherty	1935 W. L. Allison—John Van Ryn
1903 R. F. Doherty—H. L. Doherty	1936 J. D. Budge—C. G. Mako
1904 Holcombe Ward—B. C. Wright	1937 Baron G. von Cramm—Henner Henkel
1905 Holcombe Ward—B. C. Wright	1938 J. D. Budge—C. G. Mako
1906 Holcombe Ward—B. C. Wright	1939 A. K. Quist—J. E. Bromwich
1907 H. H. Hackett—F. B. Alexander	1940 J. A. Kramer—F. R. Schroeder, Jr.
1908 H. H. Hackett—F. B. Alexander	1941 J. A. Kramer—F. R. Schroeder, Jr.
1909 H. H. Hackett—F. B. Alexander	1942 Lt. (jg) Gardnar Mulloy—W. F. Talbert
1910 H. H. Hackett—F. B. Alexander	1943 J. A. Kramer—Cpl. F. A. Parker
1911 R. D. Little—G. F. Touchard	1944 Lt. W. D. McNeil—a/c Robert Falkenburg
1912 M. E. McLoughlin—T. C. Bundy	1945 Lt. Gardnar Mulloy—W. F. Talbert
1913 M. E. McLoughlin—T. C. Bundy	1946 Gardnar Mulloy—W. F. Talbert

*Patriotic tournament. †Challenge round abandoned.

Mrs. Helen Wills Moody Roark won the national singles championship seven times and the Wimbledon crown eight times. Mrs. Roark captured her first American crown in 1923 and her last in 1931. Her first Wimbledon title came in 1927 and her last in 1938.

In 1923, Mrs. George Wightman, the former Hazel Hotchkiss, donated the Wightman Cup for competition between teams of women players from the United States and England. Mrs. Wightman was the national singles titleholder in 1909, 1910 and 1911.—*Encyc. Brit.*

Women's Singles

Ellen F. Hansell	1907 Evelyn Sears	1927 Helen N. Wills
Bertha L. Townsend	1908 Mrs. Maud Bargar-Wallach	1928 Helen N. Wills
Bertha L. Townsend	1909 Hazel V. Hotchkiss	1929 Helen N. Wills
Ellen C. Roosevelt	1910 Hazel V. Hotchkiss	1930 Betty Nuthall
Mabel E. Cahill	1911 Hazel V. Hotchkiss	1931 Mrs. Helen W. Moody
Mabel E. Cahill	1912 Mary K. Browne	1932 Helen Jacobs
Aline M. Terry	1913 Mary K. Browne	1933 Helen Jacobs
Helen R. Helwig	1914 Mary K. Browne	1934 Helen Jacobs
Juliette P. Atkinson	1915 Molla Bjurstedt	1935 Helen Jacobs
Elisabeth H. Moore	1916 Molla Bjurstedt	1936 Alice Marble
Juliette P. Atkinson	1917 Molla Bjurstedt*	1937 Anita Lizana
Juliette P. Atkinson	1918 Molla Bjurstedt†	1938 Alice Marble
Marion Jones	1919 Mrs. George W. Wightman	1939 Alice Marble
Myrtle McAteer	1920 Mrs. Franklin I. Mallory	1940 Alice Marble
Elisabeth H. Moore	1921 Mrs. Franklin I. Mallory	1941 Mrs. Sarah P. Cooke
Marion Jones	1922 Mrs. Franklin I. Mallory	1942 Pauline M. Betz
Elisabeth H. Moore	1923 Helen N. Wills	1943 Pauline M. Betz
May G. Sutton	1924 Helen N. Wills	1944 Pauline M. Betz
Elisabeth H. Moore	1925 Helen N. Wills	1945 Mrs. Sarah P. Cooke
Helen Homans	1926 Mrs. Franklin I. Mallory	1946 Pauline M. Betz

Louise Hammond won patriotic tourney. †Challenge round abandoned.

Women's Doubles

1890 Ellen C. Roosevelt—Grace W. Roosevelt	1919 Marion Zinderstein—Eleanor Goss
1891 Mabel E. Cahill—Mrs. W. F. Morgan	1920 Marion Zinderstein—Eleanor Goss
1892 Mabel E. Cahill—A. M. McKinley	1921 Mary K. Browne—Mrs. R. H. Williams
1893 Aline M. Terry—Hattie Butler	1922 Mrs. J. B. Jessup—Helen N. Wills
1894 Helen R. Helwig—J. P. Atkinson	1923 Kathleen McKane—Mrs. B. C. Covell
1895 Helen R. Helwig—J. P. Atkinson	1924 Mrs. G. W. Wightman—Helen N. Wills
1896 E. H. Moore—J. P. Atkinson	1925 Mary K. Browne—Helen N. Wills
1897 J. P. Atkinson—Kathleen Atkinson	1926 Elizabeth Ryan—Eleanor Goss
1898 J. P. Atkinson—Kathleen Atkinson	1927 Mrs. L. A. Godfree—Ermyntrude Harvey
1899 Jane W. Craven—Myrtle McAteer	1928 Mrs. G. W. Wightman—Helen N. Wills
1900 Edith Parker—Hallie Champlin	1929 Mrs. Phoebe Watson—Mrs. L. R. C. Michell
1901 J. P. Atkinson—Myrtle McAteer	1930 Betty Nuthall—Sarah Palfrey
1902 J. P. Atkinson—Marion Jones	1931 Betty Nuthall—Mrs. E. B. Whittingstall
1903 E. H. Moore—Carrie B. Neely	1932 Helen Jacobs—Sarah Palfrey
1904 May G. Sutton—Miriam Hall	1933 Betty Nuthall—Freda James
1905 Helen Homans—Carrie B. Neely	1934 Helen Jacobs—Sarah Palfrey
1906 Mrs. L. S. Coe—Mrs. D. S. Platt	1935 Helen Jacobs—Mrs. S. P. Fabyan
1907 Marie Weimer—Carrie B. Neely	1936 Mrs. M. G. Van Ryn—Carolyn Babcock
1908 Evelyn Sears—Margaret Curtis	1937 Mrs. S. P. Fabyan—Alice Marble
1909 Hazel V. Hotchkiss—Edith E. Rotch	1938 Mrs. S. P. Fabyan—Alice Marble
1910 Hazel V. Hotchkiss—Edith E. Rotch	1939 Mrs. S. P. Fabyan—Alice Marble
1911 Hazel V. Hotchkiss—Eleanora Sears	1940 Mrs. S. P. Fabyan—Alice Marble
1912 Dorothy Green—Mary K. Browne	1941 Mrs. S. P. Cooke—Margaret Osborne
1913 Mary K. Browne—Mrs. R. H. Williams	1942 A. Louise Brough—Margaret Osborne
1914 Mary K. Browne—Mrs. R. H. Williams	1943 A. Louise Brough—Margaret Osborne
1915 Mrs. G. W. Wightman—Eleanora Sears	1944 A. Louise Brough—Margaret Osborne
1916 Molla Bjurstedt—Eleanora Sears	1945 A. Louise Brough—Margaret Osborne
1917 Molla Bjurstedt—Eleanora Sears	1946 A. Louise Brough—Margaret Osborne
1918 Marion Zinderstein—Eleanor Goss	

The first lawn tennis tournament in the United States, a handicap event, was played at Nahant, Mass., in August 1876. Mr. James Dwight, called "The Father of American Lawn Tennis," won the tourney.

The first official championships of the United States, played under English rules and with English balls, were held at the Casino, Newport, R. I., in August 1881. There were 25 competitors in the singles and 13 pairs in the doubles. The singles was won by Richard D. Sears of Boston, who held the title every year until 1888.

The first Davis Cup contest was played between the United States and the British Isles at the Longwood Cricket Club, Chestnut Hill, Mass., in 1900. The United States won, three matches to none. The Cup was donated by Dwight F. Davis, then a Harvard undergraduate, for international competition.—*Encyc. Brit.*

The first professional lawn tennis match in America was played between Thomas Pettit and George Kerr, British professional, at the Newport (R. I.) Casino on Aug. 29, 1889. Kerr won the contest.

BRITISH CHAMPIONS

Men's Singles

1877 S. W. Gore
 1878 P. F. Hadow
 1879 J. T. Hartley
 1880 J. T. Hartley
 1881 W. Renshaw
 1882 W. Renshaw
 1883 W. Renshaw
 1884 W. Renshaw
 1885 W. Renshaw
 1886 W. Renshaw
 1887 H. F. Lawford
 1888 E. Renshaw
 1889 W. Renshaw
 1890 W. J. Hamilton
 1891 W. Baddeley
 1892 W. Baddeley
 1893 J. Pin
 1894 J. Pin
 1895 W. Baddeley
 1896 H. S. Mahony
 1897 R. F. Doherty

1898 R. F. Doherty
 1899 R. F. Doherty
 1900 R. F. Doherty
 1901 A. W. Gore
 1902 H. L. Doherty
 1903 H. L. Doherty
 1904 H. L. Doherty
 1905 H. L. Doherty
 1906 H. L. Doherty
 1907 N. E. Brookes
 1908 A. W. Gore
 1909 A. W. Gore
 1910 A. F. Wilding
 1911 A. F. Wilding
 1912 A. F. Wilding
 1913 A. F. Wilding
 1914 N. E. Brookes
 1915-18 No tournaments
 1919 G. L. Patterson
 1920 W. T. Tilden, II
 1921 W. T. Tilden, II

1922 G. L. Patterson*
 1923 W. M. Johnston
 1924 J. Borotra
 1925 R. Lacoste
 1926 J. Borotra
 1927 H. Cochet
 1928 R. Lacoste
 1929 H. Cochet
 1930 W. T. Tilden, II
 1931 S. B. Wood
 1932 H. E. Vines, Jr.
 1933 J. H. Crawford
 1934 F. J. Perry
 1935 F. J. Perry
 1936 F. J. Perry
 1937 J. D. Budge
 1938 J. D. Budge
 1939 R. L. Riggs
 1940-45 No tournaments
 1946 Yvon Petra

*Challenge round abandoned.

Men's Doubles

1879 L. R. Erskine—H. F. Lawford
 1880 W. Renshaw—E. Renshaw
 1881 W. Renshaw—E. Renshaw
 1882 J. T. Hartley—R. T. Richardson
 1883 C. W. Grinstead—C. E. Welldon
 1884 W. Renshaw—E. Renshaw
 1885 W. Renshaw—E. Renshaw
 1886 W. Renshaw—E. Renshaw
 1887 P. Bowes-Lyon—H. W. W. Wilberforce
 1888 W. Renshaw—E. Renshaw
 1889 W. Renshaw—E. Renshaw
 1890 J. L. Pim—F. O. Stoker
 1891 W. Baddeley—H. Baddeley
 1892 H. S. Barlow—E. W. Lewis
 1893 J. L. Pim—F. O. Stoker
 1894 W. Baddeley—H. Baddeley
 1895 W. Baddeley—H. Baddeley
 1896 W. Baddeley—H. Baddeley
 1897 R. F. Doherty—H. L. Doherty
 1898 R. F. Doherty—H. L. Doherty

1899 R. F. Doherty—H. L. Doherty
 1900 R. F. Doherty—H. L. Doherty
 1901 R. F. Doherty—H. L. Doherty
 1902 S. H. Smith—F. L. Riseley
 1903 R. F. Doherty—H. L. Doherty
 1904 R. F. Doherty—H. L. Doherty
 1905 R. F. Doherty—H. L. Doherty
 1906 S. H. Smith—F. L. Riseley
 1907 N. E. Brookes—A. F. Wilding
 1908 A. F. Wilding—M. J. G. Ritchie
 1909 A. W. Gore—H. R. Barrett
 1910 A. F. Wilding—M. J. G. Ritchie
 1911 M. Decugis—A. H. Gobert
 1912 H. R. Barrett—C. P. Dixon
 1913 H. R. Barrett—C. P. Dixon
 1914 N. E. Brookes—A. F. Wilding
 1915-18 No tournaments
 1919 R. V. Thomas—P. O'Hara Wood
 1920 R. N. Williams, 2d—C. S. Garland
 1921 R. Lycett—M. Woosnam
 1922 R. Lycett—J. O. Anderson*

1923 R. Lycett—L. A. Godfree
 1924 V. Richards—F. T. Hunter
 1925 J. Borotra—R. Lacoste
 1926 H. Cochet—J. Brugnon
 1927 W. T. Tilden, 2d—F. T. Hunter
 1928 H. Cochet—J. Brugnon
 1929 W. Allison—J. Van Ryn
 1930 W. Allison—J. Van Ryn
 1931 G. M. Lott—J. Van Ryn
 1932 J. Borotra—J. Brugnon
 1933 J. Borotra—J. Brugnon
 1934 G. M. Lott—L. R. Stofen
 1935 J. H. Crawford—A. K. Quist
 1936 C. R. D. Tuckey—G. P. Hughes
 1937 J. D. Budge—C. Gene Mako
 1938 J. D. Budge—C. Gene Mako
 1939 R. L. Riggs—E. T. Cooke
 1940-45 No tournaments
 1946 John Kramer—Tom Brown

*Challenge round abandoned.

Women's Singles

1884 M. Watson
 1885 M. Watson
 1886 Miss Bingley
 1887 L. Dod
 1888 L. Dod
 1889 Mrs. Hillyard
 1890 L. Rice
 1891 L. Dod
 1892 L. Dod
 1893 L. Dod
 1894 Mrs. Hillyard
 1895 C. Cooper
 1896 C. Cooper
 1897 Mrs. Hillyard
 1898 C. Cooper
 1899 Mrs. Hillyard
 1900 Mrs. Hillyard
 1901 Mrs. Sterry
 1902 M. E. Robb

1903 Miss Douglas
 1904 Miss Douglas
 1905 M. Sutton
 1906 Miss Douglas
 1907 M. Sutton
 1908 Mrs. Sterry
 1909 D. Boothby
 1910 Mrs. L. Chambers
 1911 Mrs. L. Chambers
 1912 Mrs. Larcombe
 1913 Mrs. L. Chambers
 1914 Mrs. L. Chambers
 1915-18 No tournaments
 1919 Mlle. Lenglen
 1920 Mlle. Lenglen
 1921 Mlle. Lenglen
 1922 Mlle. Lenglen
 1923 Mlle. Lenglen

1924 K. McKane
 1925 Mlle. Lenglen
 1926 Mrs. Godfree
 1927 H. Wills
 1928 H. Wills
 1929 H. Wills
 1930 Mrs. F. S. Moody
 1931 Fri. C. Aussen
 1932 Mrs. F. S. Moody
 1933 Mrs. F. S. Moody
 1934 D. E. Round
 1935 Mrs. F. S. Moody
 1936 H. H. Jacobs
 1937 D. E. Round
 1938 Mrs. F. S. Moody
 1939 A. Marble
 1940-45 No tournaments
 1946 Pauline M. Betz

Women's Doubles

1 Mrs. McNair—Miss Boothby	1925 Mlle. Lenglen—Miss Ryan	1933 Miss Ryan—Mme. Mathieu
2 Miss Ryan—A. M. Morton	1926 Miss Ryan—M. K. Browne	1934 Miss Ryan—Mme. Mathieu
3 18 No tournaments	1927 Miss Ryan—H. Wills	1935 K. E. Stammers—F. James
4 Mlle. Lenglen—Miss Ryan	1928 Mrs. H. Watson—P. Saunders	1936 K. E. Stammers—F. James
5 Mlle. Lenglen—Miss Ryan	1929 Mrs. H. Watson—Mrs. Michell	1937 Mme. S. Mathieu—A. M. Yorke
6 Mlle. Lenglen—Miss Ryan	1930 Miss Ryan—Mrs. F. S. Moody	1938 A. Marble—Mrs. S. P. Fabyan
7 Mlle. Lenglen—Miss Ryan	1931 Mrs. Shepherd-Barron—Mrs. Mud-	1939 A. Marble—Mrs. S. P. Fabyan
8 Mlle. Lenglen—Miss Ryan	ford King	1940-45 No tournaments
9 Mrs. Wightman—H. Wills	1932 Mlle. D. Metaxa—Mlle. J. Sigart	1946 L. Brough—M. Osborne

COURT TENNIS

Source: Allison Danzig, The New York Times.

National Champions

1 Richard D. Sears, Boston A.A.	1927 George Huband, England, and Chicago R. C.
2 Fiske Warren, Boston A.A.	1928-29 Hewitt Morgan, R. and T. Club
3-95 B. Spalding de Garmendia, R. and T. Club	1930 Lord Aberdare, England
4 Lawrence M. Stockton, Boston A.A.	1931-32 William C. Wright, Philadelphia
5 George R. Fearing, Jr., Boston A.A.	1933 James H. Van Alen, R. and T. Club
6-99 Lawrence M. Stockton, Boston A.A.	1934-37 Ogden Phipps, R. and T. Club
7 Eustace H. Miles, England	1938 James H. Van Alen, R. and T. Club
8-104 Joshua Crane, Boston A.A.	1939 Ogden Phipps, R. and T. Club
9 Charles E. Sands, R. and T. Club	1940 James H. Van Alen, R. and T. Club
10-17 Jay Gould, Philadelphia R. C.	1941 Alastair B. Martin, R. and T. Club
11-19 No tournaments	1942-45 No tournaments
12-25 Jay Gould, Philadelphia R. C.	1946 Robert Grant, III, R. and T. Club
13 C. Suydam Cutting, R. and T. Club	

SQUASH RACQUETS

Source: United States Squash Racquets Association.

National Singles Champions

1 John A. Miskey, Overbrook G. C.	1927 Myles P. Baker, Boston A. A.
2 John A. Miskey, Overbrook G. C.	1928 Herbert N. Rawlins, Jr., R. and T. Club, N. Y.
3 W. L. Freeland, Germantown C. C.	1929 J. Lawrence Pool, Harvard Club, New York.
4 John A. Miskey, Overbrook G. C.	1930 Herbert N. Rawlins, Jr., R. and T. Club, N. Y.
5 F. S. White, Germantown C. C.	1931 J. Lawrence Pool, Harvard Club, New York.
6 Constantine Hutchins, Boston A. A.	1932 Beekman Pool, Harvard University.
7 Mortimer L. Newhall, Germantown C. C.	1933 Beekman Pool, Harvard Club, New York.
8 Constantine Hutchins, Boston T. and R. Club.	1934 Neil J. Sullivan, Germantown C. C.
9 Stanley W. Pearson, Germantown C. C.	1935 Donald Strachan, Philadelphia C. C.
10 Stanley W. Pearson, Germantown C. C.	1936 Germain G. Glidden, Harvard University.
11 Stanley W. Pearson, Germantown C. C.	1937 Germain G. Glidden, Harvard Club, New York.
12 Stanley W. Pearson, Germantown C. C.	1938 Germain G. Glidden, Harvard Club, New York.
13-19 No tournaments.	1939 Donald Strachan, Merion C. C.
14 Charles C. Peabody, Union B. C., Boston.	1940 A. Willing Patterson, Philadelphia R. C.
15 Stanley W. Pearson, Philadelphia R. C.	1941 Charles W. Brinton, Princeton University.
16 Stanley W. Pearson, Philadelphia R. C.	1942 Charles W. Brinton, Princeton University.
17 Gerald Robarts, Bath Club, London.	1943-45 No tournaments.
18 W. Palmer Dixon, Harvard University.	1946 Charles W. Brinton, Philadelphia.
19 W. Palmer Dixon, R. and T. Club, N. Y.	

Lapham International Trophy Record

Year	Result	Where played	Year	Result	Where played
22	U. S. 11, Canada 2	Boston	1934	U. S. 10, Canada 1	Cedarhurst, N. Y.
23	U. S. 9, Canada 3	Toronto	1935	U. S. 11, Canada 4	Montreal
24	U. S. 7½, England 6, Canada 1½	Philadelphia	1936	U. S. 10, Canada 2	Detroit
25	U. S. 10, Canada 5	Montreal	1937	Canada 8, U. S. 7	Montreal
26	U. S. 13, Canada 2	New York	1938	U. S. 13, Canada 2	Boston
27	England 17½, U. S. 16½, Canada 11	Toronto	1939	Canada 11, U. S. 4	Toronto
28	U. S. 14, Canada 1	Buffalo	1940	Canada 10, U. S. 5	Hartford
29	Canada 8, U. S. 4	Hamilton	1941	U. S. 8, Canada 7	Toronto
30	U. S. 8, Canada 1	Baltimore	1942	U. S. 13, Canada 2	Rochester, N. Y.
31	Canada 6, U. S. 5	Quebec	1943	Canada 7, U. S. 5	Montreal
32	U. S. 8, Canada 0	Hartford	1944	U. S. 12, Canada 3	New York
33	Canada 11, U. S. 4	Toronto	1945	Canada 12, U. S. 3	Toronto
			1946	U. S. 13, Canada 2	Boston

RACQUETS

Source: Allison Danzig, *The New York Times*.

National Champions

1890	B. Spalding de Garmendia, N. Y. Racquet Court	1915	C. C. Pell, R. and T. Club and Tuxedo
1891	B. Spalding de Garmendia, R. and T. Club	1916	S. G. Mortimer, R. and T. Club and Tuxedo
1892	J. S. Tooker, R. and T. Club, Boston A.A.	1917	C. C. Pell, R. and T. Club and Tuxedo
1893-94	B. Spalding de Garmendia, R. and T. Club	1918-19	No tournaments
1895	J. S. Tooker, R. and T. Club, Boston A.A.	1920-22	C. C. Pell, R. and T. Club and Tuxedo
1896-97	B. Spalding de Garmendia, R. and T. Club	1923	S. G. Mortimer, R. and T. Club and Tuxedo
1898	F. F. Rolland, Canada	1924-25	C. C. Pell, R. and T. Club and Tuxedo
1899	Quincy A. Shaw, Jr., Boston A.A.	1926	S. G. Mortimer, R. and T. Club and Tuxedo
1900	Eustace H. Miles, England	1927-28	C. C. Pell, R. and T. Club and Tuxedo
1901	Quincy A. Shaw, Jr., Boston A.A.	1929	H. D. Sheldon, R. and T. Club
1902	Clarence H. Mackay, R. and T. Club	1930	S. G. Mortimer, R. and T. Club and Tuxedo
1903	Payne Whitney, R. and T. Club	1931-33	C. C. Pell, R. and T. Club and Tuxedo
1904	George H. Brooke, Philadelphia R. C.	1934	E. M. Edwards, Philadelphia R. C.
1905	Lawrence Waterbury, R. and T. Club	1935	H. D. Sheldon, R. and T. Club
1906	Percy D. Haughton, R. and T. Club	1936	E. M. Edwards, Philadelphia R. C.
1907	Reginald Fincke, R. and T. Club	1937-39	Robert Grant, III, R. and T. Club
1908	Quincy A. Shaw, Jr., Boston T. and R. Club	1940	Warren Ingersoll, III, Philadelphia R. C.
1909	H. F. McCormick, University Club, Chicago	1941	Robert Grant, III, R. and T. Club
1910	Quincy A. Shaw, Jr., Boston T. and R. Club	1942-45	No tournaments
1911-12	Reginald Fincke, R. and T. Club	1946	Robert Grant, III, R. and T. Club
1913-14	Lawrence Waterbury, R. and T. Club		

Gold Racquet Winners

Tuxedo, N. Y.

1904	—M. S. Barger, R. and T. Club	1928	—S. G. Mortimer, R. and T. Club and Tuxedo
1905-07	—C. H. Mackay, R. and T. Club	1929-30	—C. C. Pell, R. and T. Club and Tuxedo
1908	—J. G. Douglas, R. and T. Club	1931	—S. G. Mortimer, R. and T. Club and Tuxedo
1909	—H. F. McCormick, Chicago Univ. Club	1932-33	—C. C. Pell, R. and T. Club and Tuxedo
1910	—G. C. Clark, R. and T. Club	1934	—J. R. Leonard, Tuxedo
1911-12	—J. G. Douglas, R. and T. Club	1935	—H. B. Sheldon, R. and T. Club
1913	—H. F. McCormick, Chicago Univ. Club	1936-39	—R. Grant III, R. and T. Club
1914-17	—C. C. Pell, R. and T. Club and Tuxedo	1940	—J. R. Leonard, Tuxedo
1918-20	No tournaments	1941	—R. Grant III, R. and T. Club
1921-23	—C. C. Pell, R. and T. Club	1942-45	No tournaments
1924	—S. G. Mortimer, R. and T. Club and Tuxedo	1946	—R. Grant III, R. and T. Club
1925-27	—C. C. Pell, R. and T. Club and Tuxedo		

SQUASH TENNIS

National Champions

Year	Winner and club	Year	Winner and club
1911	Alfred Stillman, Harvard	1928	Rowland B. Haines, Columbia
1912	Alfred Stillman, Harvard	1929	Rowland B. Haines, Columbia
1913	George Whitney, Harvard	1930	Harry F. Wolf, New York A. C.
1914	Alfred Stillman, Harvard	1931	Harry F. Wolf, New York A. C.
1915	Eric S. Winston, Harvard	1932	Harry F. Wolf, New York A. C.
1916	Eric S. Winston, Harvard	1933	Harry F. Wolf, New York A. C.
1917	Eric S. Winston, Harvard	1934	Harry F. Wolf, New York A. C.
1918	Fillmore Van S. Hyde, Harvard	1935	Harry F. Wolf, New York A. C.
1919	John W. Appel, Jr., Harvard	1936	Harry F. Wolf, New York A. C.
1920	Auguste J. Cordier, Yale	1937	Harry F. Wolf, New York A. C.
1921	Fillmore Van S. Hyde, Harvard	1938	Harry F. Wolf, Montclair
1922	Thomas R. Coward, Yale	1939	Harry F. Wolf, New York A. C.
1923	R. Earl Fink, Crescent	1940	Harry F. Wolf, New York A. C.
1924	Fillmore Van S. Hyde, Harvard	1941	Joseph J. Lordi, New York A. C.
1925	William Rand, Jr., Harvard	1942-45	No tournaments
1926	Fillmore Van S. Hyde, Harvard	1946	Frank R. Hanson, Columbia
1927	Rowland B. Haines, Columbia		

Grant Double Victor

Robert Grant III of New York, in winning the national amateur court tennis and racquets championships in 1946, became

the first player since 1900 to hold both titles simultaneously. Grant represents the Racquet and Tennis Club.

TABLE TENNIS

Source: United States Table Tennis Association (compiled by Victor B. Rupp).

World Champions

Year	Men's singles	Men's doubles	Year	Women's singles
1927-28	R. Jacobi, Hungary	Jacobi-Pecsi, Hungary	1927-31	M. Mednyansky, Hungary
1928-29	M. Mechlovits, Hungary	Liebster-Thum, Austria	1932	A. Sipes, Hungary
1929-30	Fred Perry, England	Barna-Szabados, Hungary	1933	A. Sipes, Hungary
1930-31	Viktor Barna, Hungary	Barna-Szabados, Hungary	1934	Marie Kettnerova, Czechoslovakia
1931-32	Miklos Szabados, Hungary	Barna-Szabados, Hungary	1935	Marie Kettnerova, Czechoslovakia
1932-33	Viktor Barna, Hungary	Barna-Szabados, Hungary	1936	Ruth Hughes Aarons, United States
1933-34	Viktor Barna, Hungary	Barna-Glancz, Hungary	1937	No tournament
1934-35	Viktor Barna, Hungary	Barna-Szabados, Hungary	1938	Trudi Pritzi, Austria
1935-36	Viktor Barna, Hungary	Barna-Szabados, Hungary	1939	Vlasla Depetrisova, Czechoslovakia
1936-37	Standa Kolar, Czechoslovakia	Blattner-McClure, United States	1940-46	No tournaments
1937-38	Richard Bergmann, Austria	Blattner-McClure, United States		
1938-39	Bohumil Vana, Czechoslovakia	McClure-Schiff, United States		
1939-40	Richard Bergmann, Austria	Bergmann, Austria-Barna, Hungary		
1940-46	No tournaments			

Richard Miles and Miss Bernice Charney, national table tennis champions in 1946. head their respective lists in the 1946-47 rankings of the United States Table Tennis Association. Sol Schiff is given the No. 2 spot on the men's list, followed by Douglas Cartland, No. 3; Edward Pinner, No. 4, and John Somael, No. 5.

United States Champions

MEN'S SINGLES

1931	Marcus Schussheim, New York
1932	Coleman Clark, Chicago, Ill.*
	Marcus Schussheim, New York*
1933	James M. Jacobson, New Rochelle, N. Y.*
	Sidney Heitner, New York*
1934	James McClure, Indianapolis, Ind.*
	Sol Schiff, New York*
1935	A. Berenbaum, New York
1936	Viktor Barna, Hungary†
	Sol Schiff, New York†
1937	Laszlo Bellak, Hungary†
1938	Laszlo Bellak, Hungary
1939	James McClure, Indianapolis, Ind.
1940	Louis Pagliaro, New York
1941	Louis Pagliaro, New York
1942	Louis Pagliaro, New York
1943	William Holzrichter, Chicago, Ill.
1944	John Somael, New York
1945	Richard Miles, New York
1946	Richard Miles, New York

MEN'S DOUBLES

1932	James M. Jacobson-George T. Bacon, Jr., New Rochelle, N. Y.
1933	Paul Pearson-Edwin Lewis, Chicago, Ill.*
	Ralph Langsam-Lloyd Waterson, New York*
1934	Samuel Silberman-Alan Lobell, New York*
	Sol Schiff, New York-Manny Moskowitz, Rutherford, N. J.*
1935	A. Berenbaum, New York-Edward Silverglade, Trenton, N. J.
1936	James McClure, Indianapolis, Ind.-Robert Blattner, St. Louis, Mo.†
	James M. Jacobson, New Rochelle, N. Y.-Sol Schiff, New York†
1937	Laszlo Bellak, Hungary-Standa Kolar, Czechoslovakia†
1938	Sol Schiff, New York-James McClure, Indianapolis, Ind.
1939	Laszlo Bellak-Tibor Hazi, Hungary
1940	Sol Schiff, New York-James McClure, Indianapolis, Ind.
1941	Edward Pinner-Cy Sussman, New York
1942	Edward Pinner-Cy Sussman, New York
1943	Laszlo Bellak, New York-Tibor Hazi, Philadelphia, Pa.
1944	William Holzrichter, Chicago, Ill.-Laszlo Bellak, New York
1945	John Somael, New York-Max Hersh, Detroit, Mich.
1946	Edward Pinner-Cy Sussman, New York

*Co-champions. At the time there were two national associations, each with its own champion. †Open championships. ‡Closed championships.

WOMEN'S SINGLES

1933	Jessie Purves, Des Plaines, Ill.*
	Mrs. Fan Pockrose, New York*
1934	Ruth Hughes Aarons, Stamford, Conn.*
	Iris Little, Maplewood, N. J.*
1935	Ruth Hughes Aarons, Stamford, Conn.
1936	Ruth Hughes Aarons, Stamford, Conn.†
1937	Ruth Hughes Aarons, Stamford, Conn.†
1938	Emily Fuller, New York
1939	Emily Fuller, New York
1940	Sally Green, Indianapolis, Ind.
1941	Sally Green, Indianapolis, Ind.
1942	Sally Green, Indianapolis, Ind.
1943	Sally Green, Indianapolis, Ind.
1944	Sally Green, Indianapolis, Ind.
1945	Davidia Hawthorn, New York
1946	Bernice Charney, New York

*Co-champions. At the time there were two national associations, each with its own champion. †Open championship. ‡Closed championship.

GOLF

IT MAY BE that golf originated in Holland—historians believe it did—but certainly Scotland fostered the game and is famous for it. In fact, in 1457 the Scottish Parliament, disturbed because football and golf had lured young Scots from the more soldierly exercise of archery, passed an ordinance that “futeball and golf be utterly cryit down and nocht usit”. James I and Charles I of the royal line of Stuarts were golf enthusiasts, whereby the game came to be known as “the royal and ancient game of golf”.

The golf balls used in the early games were leather covered and stuffed with feathers. Clubs of all kinds were fashioned by hand to suit individual players. The great step in spreading the game came with the change from the feather ball to the gutta-percha ball about 1850, and in 1860 formal competition began with the establishment of an annual tournament for the British open championship. There are records of “golf clubs” in the United

States as far back as colonial days but no proof of actual play before John Reid and some friends laid out six holes on the Reid lawn in Yonkers, N. Y., in 1888 and played there with the golf balls and clubs brought over from Scotland by Robert Lockhart. This group then formed the St. Andrews Golf Club of Yonkers, and golf was established in this country.

However, it remained a rather sedate and almost aristocratic pastime until a 20-year-old ex-caddy, Francis Ouimet of Boston, defeated two great British professionals, Harry Vardon and Ted Ray, in the United States Open championship at Brookline, Mass., in 1913. This feat put the game and Francis Ouimet on the front pages of the newspapers and stirred a wave of enthusiasm for the sport. The greatest feat so far in golf history was that of Robert Tyre Jones, Jr. of Atlanta, Ga., in winning the British Open, the British Amateur, the U. S. Open and the U. S. Amateur titles in one year, 1930.

Golf Statistics

Source: United States Golf Association.

UNITED STATES OPEN CHAMPIONS

Year	Winner	Score	Where played	Year	Winner	Score	Where played
1895	Horace Rawlins.....	173	Newport	1920	Edward Ray.....	295	Inverness
1896	James Foulis.....	152	Shinnecock Hills	1921	James M. Barnes.....	289	Columbia
1897	Joe Lloyd.....	162	Chicago	1922	Gene Sarazen.....	288	Skokie
1898*	Fred Herd.....	328	Myopia	1923	R. T. Jones, Jr. (a b).....	296	Inwood
1899	Willie Smith.....	315	Baltimore	1924	Cyril Walker.....	297	Oakland Hills
1900	Harry Vardon.....	313	Chicago	1925	W. Macfarlane (a).....	291	Worcester
1901	Willie Anderson (a).....	331	Myopia	1926	R. T. Jones, Jr. (a b).....	293	Scioto
1902	L. Auchterlonie.....	307	Garden City	1927	Tommy Armour (a).....	301	Oakmont
1903	Willie Anderson (a).....	307	Baltusrol	1928	Johnny Farrell (a).....	294	Olympia Fields
1904	Willie Anderson.....	303	Glen View	1929	R. T. Jones, Jr. (a b).....	294	Winged Foot
1905	Willie Anderson.....	314	Myopia	1930	R. T. Jones, Jr. (b).....	287	Interlachen
1906	Alex Smith.....	295	Onwentsia	1931	Billy Burke (a).....	292	Inverness
1907	Alex Ross.....	302	Philadelphia	1932	Gene Sarazen.....	286	Fresh Meadow
1908	Fred McLeod (a).....	322	Myopia	1933	John Goodman (b).....	287	North Shore
1909	George Sargent.....	290	Englewood	1934	Olin Dutra.....	293	Merion
1910	Alex Smith (a).....	298	Philadelphia	1935	Sam Parks, Jr.....	299	Oakmont
1911	J. J. McDermott (a).....	307	Chicago	1936	Tony Manero.....	282	Baltusrol
1912	J. J. McDermott.....	294	Buffalo	1937	Ralph Guldahl.....	281	Oakland Hills
1913	Francis Ouimet (a b).....	304	Brookline	1938	Ralph Guldahl.....	284	Cherry Hills
1914	Walter Hagen.....	290	Midlothian	1939	Byron Nelson (a).....	284	Philadelphia
1915	Jerome D. Travers (b).....	297	Baltusrol	1940	W. Lawson Little, Jr. (a).....	287	Canterbury
1916	Charles Evans, Jr. (b).....	286	Minikahda	1941	Craig Wood.....	284	Colonial
1917-18	No tournaments†			1942-45	No tournaments‡		
1919	Walter Hagen (a).....	301	Bræ Burn	1946	Lloyd Mangrum (a).....	284	Canterbury

(a) Won play-off. (b) Amateur. *In 1898 competition was extended to 72 holes. †In 1917, Jock Hutchinson, with a 292, won an Open Patriotic Tournament for the benefit of the American Red Cross at Whitemarsh Valley Country Club. ‡In 1942, Ben Hogan, with a 271, won a Hale America National Open Tournament for the benefit of the Navy Relief Society and USO at Ridgemoor Country Club.

UNITED STATES AMATEUR CHAMPIONS

Year	Winner	Where played	Year	Winner	Where played
1915	Charles B. Macdonald	Newport	1920	Charles Evans, Jr.	Engineers'
1916	H. J. Whigham	Shinnecock Hills	1921	Jesse P. Guilford	St. Louis
1917	H. J. Whigham	Chicago	1922	Jess W. Sweetser	Brookline
1918	Findlay S. Douglas	Morris County	1923	Max R. Marston	Flossmoor
1919	H. M. Harriman	Onwentsia	1924	R. T. Jones, Jr.	Merion
1920	Walter J. Travis	Garden City	1925	R. T. Jones, Jr.	Oakmont
1921	Walter J. Travis	Atlantic City	1926	George Von Elm	Baltusrol
1922	Louis N. James	Glen View	1927	R. T. Jones, Jr.	Minikahda
1923	Walter J. Travis	Nassau	1928	R. T. Jones, Jr.	Brae Burn
1924	H. Chandler Egan	Baltusrol	1929	H. R. Johnston	Del Monte
1925	H. Chandler Egan	Chicago	1930	R. T. Jones, Jr.	Merion
1926	Eben M. Byers	Englewood	1931	Francis Quimet	Beverly
1927	Jerome D. Travers	Euclid	1932	C. R. Somerville	Baltimore
1928	Jerome D. Travers	Garden City	1933	G. T. Dunlap, Jr.	Kenwood
1929	Robert A. Gardner	Chicago	1934	W. Lawson Little, Jr.	Brookline
1930	W. C. Fownes, Jr.	Brookline	1935	W. Lawson Little, Jr.	Cleveland
1931	Harold H. Hilton	Apawamis	1936	John W. Fischer	Garden City
1932	Jerome D. Travers	Chicago	1937	John Goodman	Alderwood
1933	Jerome D. Travers	Garden City	1938	Willie Turnesa	Oakmont
1934	Francis Quimet	Ekwanok	1939	Marvin H. Ward	North Shore
1935	Robert A. Gardner	Detroit	1940	R. D. Chapman	Winged Foot
1936	Charles Evans, Jr.	Merion	1941	Marvin H. Ward	Omaha
1937-18	No tournaments		1942-45	No tournaments	
1939	S. D. Herron	Oakmont	1946	Ted Bishop	Baltusrol

UNITED STATES WOMEN CHAMPIONS

Year	Winner	Where played	Year	Winner	Where played
1915	Mrs. C. S. Brown	Meadow Brook	1920	Alexa Stirling	Mayfield
1916	Beatrix Hoyt	Morris County	1921	Marion Hollins	Hollywood (N. J.)
1917	Beatrix Hoyt	Essex (Mass.)	1922	Glenna Collett	Greenbrier
1918	Beatrix Hoyt	Ardsey	1923	Edith Cummings	Westchester-Biltmore
1919	Ruth Underhill	Philadelphia	1924	Mrs. D. C. Hurd	Rhode Island
1920	Frances C. Griscom	Shinnecock Hills	1925	Glenna Collett	St. Louis
1921	Genevieve Hecker	Baltusrol	1926	Mrs. G. H. Stetson	Merion
1922	Genevieve Hecker	Brookline	1927	Mrs. M. B. Horn	Cherry Valley
1923	Bessie Anthony	Chicago	1928	Glenna Collett	Hot Springs (Va.)
1924	G. M. Bishop	Merion	1929	Glenna Collett	Oakland Hills
1925	Pauline Mackay	Morris County	1930	Glenna Collett	Los Angeles
1926	Harriot S. Curtis	Brae Burn	1931	Helen Hicks	Buffalo
1927	Margaret Curtis	Midlothian	1932	Virginia Van Wie	Salem
1928	K. C. Harley	Chevy Chase	1933	Virginia Van Wie	Exmoor
1929	D. I. Campbell	Merion	1934	Virginia Van Wie	Whitemarsh Valley
1930	D. I. Campbell	Homewood	1935	Mrs. E. H. Vare, Jr.	Interlachen
1931	Margaret Curtis	Baltusrol	1936	Pamela Barton	Canoe Brook
1932	Margaret Curtis	Essex (Mass.)	1937	Mrs. J. A. Page, Jr.	Memphis
1933	Gladys Ravenscroft	Wilmington	1938	Patty Berg	Westmoreland
1934	Mrs. H. A. Jackson	Nassau	1939	Betty Jameson	Wee Burn
1935	Mrs. C. H. Vanderbeck	Onwentsia	1940	Betty Jameson	Del Monte
1936	Alexa Stirling	Belmont Springs	1941	Mrs. Frank Newell	Brookline
1937-18	No tournaments		1942-45	No tournaments	
1939	Alexa Stirling	Shawnee	1946	Mrs. M. D. Zaharias	Tulsa

United States Public Links Champions

Year	Winner	Where played	Year	Winner	Where played
1922	Edmund R. Held	Toledo, Ohio	1933	Charles Ferrera	Portland, Ore.
1923	Richard J. Walsh	Washington, D. C.	1934	David A. Mitchell	Pittsburgh, Pa.
1924	Joseph Coble	Dayton, Ohio	1935	Frank Strafacci	Indianapolis, Ind.
1925	R. J. McAuliffe	Garden City, N. Y.	1936	B. Patrick Abbott	Farmingdale, N. Y.
1926	Lester Bolstad	Buffalo, N. Y.	1937	Bruce N. McCormick	San Francisco, Calif.
1927	C. F. Kauffmann	Cleveland, Ohio	1938	Al Leach	Cleveland, Ohio
1928	C. F. Kauffmann	Philadelphia, Pa.	1939	Andrew Szwedko	Baltimore, Md.
1929	C. F. Kauffmann	St. Louis, Mo.	1940	Robert C. Clark	Detroit, Mich.
1930	Robert E. Wingate	Jacksonville, Fla.	1941	William M. Welch	Spokane, Wash.
1931	Charles Ferrera	St. Paul, Minn.	1942-45	No tournaments	
1932	R. L. Miller	Louisville, Ky.	1946	Smiley Quick	Denver, Colo.

UNITED STATES P. G. A. CHAMPIONS

Source: The Professional Golfers' Association of America.

Year	Winner	Where played	Year	Winner	Where played
1916	Jim Barnes	Siwanoy	1932	Olin Dutra	Keller Course
1917-18	No tournaments		1933	Gene Sarazen	Blue Mound
1919	Jim Barnes	Engineers	1934	Paul Runyan	Park Club
1920	Jock Hutchinson	Flossmoor	1935	Johnny Revolta	Twin Hills
1921	Walter Hagen	Inwood	1936	Denny Shute	Pinehurst
1922	Gene Sarazen	Oakmont	1937	Denny Shute	Pittsburgh
1923	Gene Sarazen	Pelham	1938	Paul Runyan	Shawnee-on-Delaware
1924	Walter Hagen	French Lick	1939	Henry Picard	Pomonok
1925	Walter Hagen	Olympia Fields	1940	Byron Nelson	Hershey
1926	Walter Hagen	Salisbury	1941	Victor Ghezzi	Denver
1927	Walter Hagen	Dallas	1942	Sam Snead	Atlantic City
1928	Leo Diegel	Baltimore	1943	No tournament	
1929	Leo Diegel	Hillcrest	1944	Bob Hamilton	Spokane
1930	Tommy Armour	Fresh Meadow	1945	Byron Nelson	Dayton
1931	Tom Creavy	Wannamoisett	1946	Ben Hogan	Portland, Oregon

BRITISH OPEN CHAMPIONS

Year	Winner	Score	Where played	Year	Winner	Score	Where played
1860	W. Park	174	Prestwick	1900	J. H. Taylor	309	St. Andrews
1861	Tom Morris, Sr.	163	Prestwick	1901	James Braid	309	Muirfield
1862	Tom Morris, Sr.	163	Prestwick	1902	Alex Herd	307	Hoylake
1863	W. Park	168	Prestwick	1903	H. Vardon	300	Prestwick
1864	Tom Morris, Sr.	167	Prestwick	1904	Jack White	296	Sandwich
1865	A. L. Strath	162	Prestwick	1905	James Braid	318	St. Andrews
1866	W. Park	169	Prestwick	1906	James Braid	300	Muirfield
1867	Tom Morris, Sr.	170	Prestwick	1907	Arnaud Massy	312	Hoylake
1868	Tom Morris, Jr.	170	Prestwick	1908	James Braid	291	Prestwick
1869	Tom Morris, Jr.	154	Prestwick	1909	J. H. Taylor	295	Deal
1870	Tom Morris, Jr.	149	Prestwick	1910	James Braid	299	St. Andrews
1872	Tom Morris, Jr.	166	Prestwick	1911	Harry Vardon (a)	303	Sandwich
1873	Tom Kidd	179	St. Andrews	1912	E. Ray	295	Muirfield
1874	Mungo Park	159	Musselburgh	1913	J. H. Taylor	304	Hoylake
1875	Willie Park	166	Prestwick	1914	Harry Vardon	306	Prestwick
1875	Bob Martin	176	St. Andrews	1915-19	No tournaments		
1876	Jamie Anderson	160	Musselburgh	1920	George Duncan	303	Deal
1878	Jamie Anderson	157	Prestwick	1921	Jock Hutchinson (a)	296	St. Andrews
1879	Jamie Anderson	170	St. Andrews	1922	Walter Hagen	300	Sandwich
1880	Bob Ferguson	162	Musselburgh	1923	A. G. Havers	295	Troon
1881	Bob Ferguson	170	Prestwick	1924	Walter Hagen	301	Hoylake
1882	Bob Ferguson	171	St. Andrews	1925	Jim Barnes	300	Prestwick
1883	W. L. Fernie (a)	159	Musselburgh	1926	R. T. Jones, Jr.	291	Royal Lytham, St. Annes
1884	Jack Simpson	160	Prestwick	1927	R. T. Jones, Jr.	285	St. Andrews
1885	Bob Martin	171	St. Andrews	1928	Walter Hagen	292	Sandwich
1886	D. L. Brown	157	Musselburgh	1929	Walter Hagen	292	Muirfield
1887	W. Park, Jr.	161	Prestwick	1930	R. T. Jones, Jr.	291	Hoylake
1888	Jack Burns	171	St. Andrews	1931	T. D. Armour	296	Carnoustie
1889	W. Park, Jr. (a)	155	Musselburgh	1932	G. Sarazen	283	Princes, Sandwich
1890	John Ball	164	Prestwick	1933	D. Shute (a)	282	St. Andrews
1891	Hugh Kirkaldy	166	St. Andrews	1934	T. H. Cotton	283	Sandwich
1892*	H. H. Hilton	305	Muirfield	1935	A. Perry	283	Muirfield
1893	W. Auchterlonie	322	Prestwick	1936	A. H. Padgham	287	Royal Liverpool
1894	J. H. Taylor	326	Sandwich	1937	T. H. Cotton	290	Carnoustie
1895	J. H. Taylor	322	St. Andrews	1938	R. A. Whitcombe	295	Sandwich
1896	H. Vardon (a)	316	Muirfield	1939	R. Burton	290	St. Andrews
1897	H. H. Hilton	314	Hoylake	1940-45	No tournaments		
1898	H. Vardon	307	Prestwick	1946	Sam Snead	290	St. Andrews
1899	H. Vardon	310	Sandwich				

(a) Won play-off. *In 1892 competition was extended to 72 holes.

Snead 8th American to Take British Open

Eight Americans, including Sam Snead, victor in 1946, have won the British Open golf championship. The list is headed by Walter Hagen, who triumphed in 1922, 1924, 1928 and 1929. Bobby Jones finished first in 1926, 1927 and 1930, the year he

scored his famous "grand slam." Other American winners were Jock Hutchinson, Sr., 1921; Jim Barnes, 1925; Tommy Armour, 1931; Gene Sarazen, 1932, and Denny Shute, 1933. Hutchinson and Armour won the title after moving to the United States.

BRITISH AMATEUR CHAMPIONS

Winner	Where played	Year	Winner	Where played
A. F. MacFie.....	Hoylake	1912	John Ball.....	Westward Ho
H. G. Hutchinson.....	St. Andrews	1913	H. H. Hilton.....	St. Andrews
H. G. Hutchinson.....	Hoylake	1914	J. L. C. Jenkins.....	Sandwich
John Ball.....	Prestwick	1915-19	No tournaments	
J. E. Laidlay.....	St. Andrews	1920	Cyril J. H. Tolley.....	Muirfield
John Ball.....	Hoylake	1921	W. I. Hunter.....	Hoylake
J. E. Laidlay.....	St. Andrews	1922	E. W. E. Holderness.....	Prestwick
John Ball.....	Sandwich	1923	R. H. Wethered.....	Deal
Peter L. Anderson.....	Prestwick	1924	E. W. E. Holderness.....	St. Andrews
John Ball.....	Hoylake	1925	Robert Harris.....	Westward Ho
L. M. B. Melville.....	St. Andrews	1926	Jesse Sweetser.....	Muirfield
F. G. Tait.....	Sandwich	1927	Dr. W. Tweddell.....	Hoylake
A. J. T. Allan.....	Muirfield	1928	T. P. Perkins.....	Prestwick
F. G. Tait.....	Hoylake	1929	C. J. H. Tolley.....	Sandwich
John Ball.....	Prestwick	1930	R. T. Jones, Jr.....	St. Andrews
H. H. Hilton.....	Sandwich	1931	E. Martin Smith.....	Westward Ho
H. H. Hilton.....	St. Andrews	1932	J. De Forest.....	Muirfield
C. Hutchings.....	Hoylake	1933	Hon. M. Scott.....	Hoylake
R. Maxwell.....	Muirfield	1934	W. Lawson Little, Jr.....	Prestwick
W. J. Travis.....	Sandwich	1935	W. Lawson Little, Jr.....	Royal Lytham, St. Annes
A. G. Barry.....	Prestwick	1936	H. Thomson.....	St. Andrews
James Robb.....	Hoylake	1937	R. Sweeny, Jr.....	Sandwich
John Ball.....	St. Andrews	1938	C. R. Yates.....	Troon
E. A. Lassen.....	Sandwich	1939	A. Kyle.....	Hoylake
R. Maxwell.....	Muirfield	1940-45	No tournaments	
John Ball.....	Hoylake	1946	J. Bruen.....	Birkdale
H. H. Hilton.....	Prestwick			

Intercollegiate Golf Association of America Champions

	Individual	Team	Year	Individual	Team
1917-18	Louis P. Bayard, Jr., Princeton.....	Yale	No tournaments		
1919	John Reid, Jr., Yale.....	Harvard	A. L. Walker, Jr., Columbia.....	Princeton	
1920	James F. Curtis, Harvard.....	Yale	Jess W. Sweetser, Yale.....	Princeton	
1921	Percy Pyne, 2d, Princeton.....	Harvard	J. Simpson Dean, Princeton.....	Dartmouth	
1922	No tournament		Pollack Boyd, Dartmouth.....	Princeton	
1923	H. Lindsley, Harvard.....	Harvard	Dexter Cummings, Yale.....	Princeton	
1924	Charles Hitchcock, Jr., Yale.....	Yale	Dexter Cummings, Yale.....	Yale	
1925	H. Chandler Egan, Harvard.....	Harvard	G. Fred Lamprecht, Tulane.....	Yale	
1926	F. O. Reinhart, Princeton.....	Harvard	G. Fred Lamprecht, Tulane.....	Yale	
1927	A. L. White, Harvard.....	Harvard	Watts Gunn, Georgia Tech.....	Princeton	
1928	Robert Abbott, Yale.....	Yale	M. J. McCarthy, Jr., Georgetown.....	Princeton	
1929	W. E. Clow, Jr., Yale.....	Yale	Tom Aycock, Yale.....	Princeton	
1930	Ellis Knowles, Yale.....	Yale	George T. Dunlap, Jr., Princeton.....	Princeton	
1931	H. H. Wilder, Harvard.....	Yale	George T. Dunlap, Jr., Princeton.....	Yale	
1932	Albert Seckel, Princeton.....	Yale	John W. Fischer, Jr., Michigan.....	Yale	
1933	Robert E. Hunter, Yale.....	Yale	Walter Emery, Oklahoma.....	Yale	
1934	George C. Stanley, Yale.....	Yale	Charles R. Yates, Georgia Tech.....	Michigan	
1935	F. C. Davison, Harvard.....	Yale	Ed White, U. of Texas.....	Michigan	
1936	Nathaniel Wheeler, Yale.....	Yale	Charles Kocsis, Michigan.....	Yale	
1937	Edward P. Allis, 3d, Harvard.....	Princeton	Fred Haas, Jr., L. S. U.....	Princeton	
1938	Francis R. Blossom, Yale.....	Yale	John P. Burke, Georgetown.....	Stanford	
	J. W. Hubbell, Harvard.....	Princeton			

*Two tournaments, in spring and fall.

National Collegiate Athletic Association Champions

	Individual	Team	Year	Individual	Team
1939	Vincent D'Antoni, Tulane.....	Stanford	1943	Wallace Ulrich, Carleton.....	Yale
1940	F. Dixon Brooke, Virginia.....	Princeton†	1944	Louis Lick, Minnesota.....	Notre Dame
		L. S. U.†	1945	John Lorms, Ohio State.....	Ohio State
1941	Earl Stewart, L. S. U.....	Stanford	1946	George Hamer, Georgia.....	Stanford
1942	Frank Tatum, Jr., Stanford.....	Stanford†			
		L. S. U.†			

†Tie.

Walker Cup Record**MEN (AMATEUR)**

Year	Where played
1922 United States 8, Great Britain 4....	Southampton
1923 United States 6, Great Britain 5....	St. Andrews, Scotland
1924 United States 9, Great Britain 3....	Garden City G. C.
1926 United States 6, Great Britain 5....	St. Andrews, Scotland
1928 United States 11, Great Britain 1....	Wheaton, Ill.
1930 United States 10, Great Britain 2....	Royal St. George's
1932 United States 8, Great Britain 1....	The Country Club, Brookline, Mass.
1934 United States 9, Great Britain 2....	St. Andrews, Scotland
1936 United States 9, Great Britain 0....	Pine Valley G. C., Clementon, N. J.
1938 Great Britain 7, United States 4....	St. Andrews, Scotland

Ryder Cup Record**MEN (PROFESSIONAL)**

Year	Where played
1927 United States 9½, Great Britain 2½	Worcester C. C.
1929 Great Britain 7, United States 5....	Moortown, Eng.
1931 United States 9, Great Britain 3....	Scioto C. C.
1933 Great Britain 6½, United States 5½	Southport, Eng.
1935 United States 9, Great Britain 3....	Ridgewood C. C.
1937 United States 8, Great Britain 4....	Southport, Eng.

Curtis Cup Record**WOMEN**

Year	Where played
1932 United States 5½, Great Britain 3½..	Wentworth, Eng.
1934 United States 6½, Great Britain 2½..	Chevy Chase
1936 United States 4½, Great Britain 4½..	Gleneagles
1938 United States 5½, Great Britain 3½..	Essex C. C.

BADMINTON

Source: John E. Garrod, American Badminton Association.

United States Champions**Men's singles**

1937	Walter R. Kramer, Detroit, Mich.
1938	Walter R. Kramer, Detroit, Mich.
1939	David G. Freeman, Pasadena, Calif.
1940	David G. Freeman, Pasadena, Calif.
1941	David G. Freeman, Pasadena, Calif.
1942	David G. Freeman, Pasadena, Calif.
1943-46	No tournaments

Men's doubles

Chester Goss—Donald Eversoll, Los Angeles, Calif
Hamilton Law—Richard Yeager, Seattle, Wash.
Hamilton Law—Richard Yeager, Seattle, Wash.
Chester Goss—David G. Freeman, Pasadena, Calif.
Chester Goss—David G. Freeman, Pasadena, Calif.
Chester Goss—David G. Freeman, Pasadena, Calif.

Women's singles

1937	Mrs. Del Barkhuff, Seattle, Wash.
1938	Mrs. Del Barkhuff, Seattle, Wash.
1939	Mary E. Whittemore, Boston, Mass.
1940	Evelyn Boldrick, San Diego, Calif.
1941	Thelma Kingsbury, Oakland, Calif.
1942	Evelyn Boldrick, San Diego, Calif.
1943-46	No tournaments

Women's doubles

Mrs. Del Barkhuff—Zoe G. Smith, Seattle, Wash.
Mrs. Roy C. Bergman—Helen Gibson, Westport, Conn.
Mrs. Del Barkhuff—Zoe G. Smith, Seattle, Wash.
Elizabeth Anselm—Helen Zabriskie, Oakland, Calif.
Thelma Kingsbury—Janet Wright, Oakland, Calif.
Evelyn Boldrick, San Diego, Calif.—Janet Wright, Oakland, Calif.

CHESS

Source: American Chess Bulletin.

World Champions

1851-58	Adolph Anderssen, Breslau, Germany
1858-62	Paul Morphy, New Orleans, La.
1862-66	Adolf Anderssen, Breslau, Germany
1866-94	William Steinitz, Vienna, Austria
1894-1921	Emanuel Lasker, Berlin, Germany
1921-27	Jose R. Capablanca, Havana, Cuba
1927-35	Alexander A. Alekhine, Moscow, Russia
1935-37	Dr. Max Euwe, Amsterdam, The Netherlands
1937-46	Alexander A. Alekhine, Moscow, Russia*

*Alekhine, a French citizen, died on March 23, 1946, leaving the world championship vacant.

OTHER U.S. CHAMPIONS, 1946

Open—Herman Steiner, Los Angeles.

Amateur—Paul Ellis, New York.

Junior—Larry Friedman, Cleveland.

Women—N. May Karfi, Boston.

United States Champions

1858-62	Paul Morphy, New Orleans, La.
1871-87	George H. Mackenzie, New York
1887-92	Max Judd, St. Louis, Mo.
1892-94	Simon Lipschuetz, New York
1894	Jackson W. Showalter, Georgetown, Ky.
1894	Albert B. Hodges, Staten Island, N. Y.*
1894-97	Jackson W. Showalter, Georgetown, Ky.
1897-1906	Harry Nelson Pillsbury, Boston, Mass.
1906-09	Jackson W. Showalter, Georgetown, Ky.
1909-36	Frank J. Marshall, New York
1936-44	Samuel Reshevsky, New York†
1944-46	Arnold S. Denker, New York
1946	Samuel Reshevsky, Boston

*Retired after winning return match with Showalter. †In 1942, Isaac I. Kashdan of New York was co-champion for a while because of a tie with Reshevsky in that year's tournament. Reshevsky won the play-off.

Ted Allen of Boulder, Col., won the world horseshoe pitching championship in

1946 with 22 victories and one defeat. The event was held at Des Moines.

HORSE RACING

IENT DRAWINGS on stone and bone
e that horse racing is at least 3000
s old, but Thoroughbred Racing is a
ern development. Practically every
oroughbred in training today traces its
stered ancestry back to one or more of
e sires that arrived in England about
s from the Near East and became
wn, from the names of their owners,
the Byerly Turk, the Darley Arabian
the Godolphin Arabian. The Jockey
b (English) was founded at Newmarket
1750 or 1751 and became the custodian
the Stud Book as well as the court of
resort in deciding turf affairs.

There was horse racing in this country
ore the Revolution, but the great lift
the breeding industry came with the
portation in 1798, by Col. John Hoomes
Virginia, of Diomed, winner of the
om Derby of 1780. Diomed's lineal
endants included such famous stars of
American turf as American Eclipse and
ington. From 1800 to the time of the
il War there were race courses and
eding establishments plentifully scat-
ed through Virginia, North Carolina,
ath Carolina, Tennessee, Kentucky and

Louisiana. In fact, thoroughbred racing
was largely a Southern sport and that was
one reason why the Confederacy had such
excellent cavalry in the Civil War. A cen-
tury ago crack horses were matched in
four-mile races that were run in heats,
best two out of three!

The oldest stake event in North America
is the King's Plate, a Canadian fixture that
was first run in the Province of Quebec in
1836. The oldest stake event in the
United States is The Travers, which was
first run at Saratoga in 1864. The gam-
bling that goes with horse racing and
trickery by jockeys, trainers, owners and
track officials caused attacks on the sport
by reformers and a demand among horse
racing enthusiasts for an honest and effec-
tive control of some kind, but nothing of
lasting value to racing came of this until
the formation of The Jockey Club in 1894.
The Jockey Club, composed of fifty mem-
bers chosen from the aristocracy of the
turf, was all-powerful in racing regula-
tion until the State Racing Commissions
came into being as a result of mutuel bet-
ting and the great revenues that came with
the tax on the "daily handle".

Horse Racing Statistics

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History of Traditional Stakes

AMERICAN DERBY

Washington Park; 3-year-olds; 1¼ miles.

run at Washington Park, Chicago, prior to 1905; run at Hawthorne, 1916. Distance 1½ miles until 1928;
Distance 1¼ miles since 1928.

Year	Winner	Jockey	Wt.	Win val.	Year	Winner	Jockey	Wt.	Win val.
1926	Boot to Boot	A. Johnson	121	89,000	1927	Hydromel	L. McDermott	116	22,750
1927	Modesty	I. Murphy	117	\$10,700	1928	Toro	E. Ambrose	126	21,925
1928	Volante	I. Murphy	123	9,570	1929	Windy City	L. McDermott	118	47,550
1929	Silver Cloud	I. Murphy	121	8,160	1930	Reveille Boy	W. Fronk	118	51,200
1930	C. H. Todd	Hamilton	118	13,690	1931	Mate	G. Ellis	126	48,675
1931	Emperor of Norfolk	I. Murphy	123	14,340	1932	Gusto	S. Coucci	118	48,200
1932	Spokane	T. Kiley	121	15,400	1933	Mr. Khayyam	P. Walls	121	23,410
1933	Uncle Bob	T. Kiley	115½	15,260	1934	Cavalcade	M. Garner	126	23,310
1934	Strathmeath	Covington	112	18,610	1935	Black Helen	D. Meade	118	25,025
1935	Carlsbad	R. Williams	122	16,930	1937	Dawn Play	L. Balaski	116	25,400
1936	Boundless	E. Garrison	122	49,500	1940	Mioland	J. Adams	123	44,900
1937	Rey el S'ta A'ta	E. Van Kuren	122	19,750	1941	Whirlaway	A. Robertson	126	44,975
1938	Pink Coat	W. Martin	127	9,225	1942	Alsab	G. Woolf	126	60,850
1939	Sidney Lucas	J. Bullman	122	9,425	1943	Askmenow	G. Woolf	115	56,150
1940	Robert Waddell	J. Bullman	119	19,275	1944	By Jimminy	G. Woolf	122	61,650
1941	Wyeth	L. Lyne	122	19,875	1945	Fighting Step	G. South	118	68,950
1942	The Picket	Helgesen	115	27,025	1946	Eternal Reward	R. Campbell	118	83,450
1943	Highball	G. C. Fuller	122	26,325					
1944	Dodge	F. Murphy	126	6,850					

ARLINGTON FUTURITY

Arlington Park; 2-year-olds; 3/4 mile.

National Futurity in 1927 and 1928. Run at Washington Park from 1943 to 1945, inclusive.

Year	Winner	Jockey	Wt.	Win val.	Year	Winner	Jockey	Wt.	Win val.
1927	Misstep	E. Pool	122	\$9,360	1938	Thingumabob	E. Arcaro	117	31,110
1928	Double Heart	L. Geving	115	21,920	1939	Andy K	J. E. Oros	114	33,730
1932	Ladysman	R. Jones	117	38,010	1940	Swain	J. Adams	117	34,470
1933	Far Star	D. Bellizzi	116	31,020	1941	Sun Again	W. Eads	122	34,470
1934	Toro Nancy	R. Jones	112	41,725	1942	Occupation	L. Balaski	117	51,500
1935	Grand Slam	J. Bryson	122	45,135	1943	Jezebel	O. Grohs	116	48,650
1936	Case Ace	A. Robertson	117	36,540	1944	Free for All	O. Grohs	122	48,520
1937*	Tiger	A. Robertson	122		1945	Spy Song	S. Brooks	122	58,650
	Teddy's Comet	G. Smith	117	18,000	1946	Cosmic Bomb	S. Clark	122	65,870

*Dead heat.

ARLINGTON HANDICAP

Arlington Park; 3-year-olds and over; 1 1/4 miles.

Distance 1 1/4 miles in 1929; 1 1/2 miles over turf course in 1941. Run at Washington Park from 1943 to 1945, inclusive.

Year	Winner, age	Jockey	Wt.	Win val.	Year	Winner, age	Jockey	Wt.	Win val.
1929	Misstep (4)	C. McCrossen	123	\$22,075	1938	Cardinals (4)	J. G. Wilson	106	4,000
1930	Pigeon Hole (5)	R. Finnerty	105	34,400	1939	Count d'Or (4)	J. Longden	112	4,050
1931	Sun Beau (6)	C. Phillips	128	27,300	1941	Equifox (4)	A. Craig	113	6,895
1932	Plucky Play (5)	G. Woolf	111	22,000	1942	Rounders (3)	F. A. Smith	103	22,000
1933	Equipoise (5)	R. Workman	135	9,260	1943	Marriage (7)	G. Burns	120	40,950
1934	Riskulus (3)	D. Meade	108	9,580	1944	War Knight (4)	C. Corbett	109	37,850
1935	Discovery (4)	J. Bejschak	135	8,640	1945	Busher (3)	J. Longden	113	36,900
1936	Sun Teddy (3)	B. James	98	8,480	1946	Historian (5)	O. Scurlock	112	38,700
1937	Dellor (3)	S. Young	107	15,375					

ARLINGTON LASSIE STAKES

Arlington Park; 2-year-old fillies; 3/4 mile.

Distance 5 1/2 furlongs prior to 1932. Run at Washington Park from 1943 to 1945, inclusive.

Year	Winner	Jockey	Wt.	Win val.	Year	Winner	Jockey	Wt.	Win val.
1929	Capture	E. Shropshire	117	\$9,175	1938	Incoelda	C. Rollins	117	17,540
1930	Risque	E. Steffen	117	6,650	1939	Now What	R. Workman	122	18,820
1931	Top Flight	A. Robertson	120	19,125	1940	Blue Delight	A. Snider	119	17,250
1932	Hilena	R. Workman	119	17,900	1941	Petrify	R. Donoso	117	17,200
1933	Mata Hari	R. Jones	117	21,670	1942	Fad	A. Craig	117	25,980
1934	Motto	R. Workman	119	22,510	1943	Twilight Tear	N. Jemas	113	26,460
1935	Forever Yours	D. Meade	117	25,790	1944	Expression	F. Zufelt	119	28,900
1936	Apogee	E. Steffen	122	21,020	1945	Beaugay	J. Adams	119	35,900
1937	Theen	I. Anderson	117	15,630	1946	Four Winds	I. Anderson	119	51,000

BELDAME HANDICAP

Aqueduct; 3-year-olds and over; fillies and mares; 1 1/2 miles.

Distance 5 furlongs and for 2-year-old fillies in 1905, 1906, 1907, 1909 and from 1917 to 1932, inclusive. Distance 1 1/4 miles in 1939.

Year	Winner, age	Jockey	Wt.	Win val.	Year	Winner, age	Jockey	Wt.	Win val.
1905	Flip Flap	Shaw	116	\$1,570	1928	Triskette	W. Kelsay	112	3,925
1906	Veil	Shaw	120	1,380	1929	The Beasel	W. Kelsay	119	4,300
1907	Berry Maid	Sumter	119	1,565	1930	Blind Lane	P. Walls	118	4,525
1909	Imprudent	E. Dugan	108	1,050	1931	Stagecraft	M. Garner	123	2,655
1917	Enfilade	J. Loftus	126	1,450	1932	Tickory Tock	P. Walls	110	1,425
1918	Pen Rose	A. Schuttinger	117	1,825	1939	Nellie Bly (3)	J. Renick	102	10,100
1919	Thelma K.	C. Kummer	116	2,350	1941	Fairy Chant (4)	I. Anderson	119	14,050
1920	Crocus	L. Ensor	118	3,725	1942*	Barrancosa (7)	E. Arcaro	116	
1921	My Reverie	C. Turner	120	3,825		Vagrancy (3)	J. Stout	116	7,800
1922	Miss Star	E. Taplin	107	4,150	1943	Mar-Kell (4)	B. Thompson	126	20,050
1923	Tree Top	F. Coltielli	115	4,525	1944	Donitas First (3)	T. Atkinson	112	18,530
1924	Superlette	L. Fator	118	3,725	1945	War Date (3)	A. Kirkland	119	24,100
1925	Patricia J.	L. Fator	112	3,875	1946†	Gallorlette (4)	J. D. Jessop	126	39,000
1926	Frielette	J. Maiben	114	4,125		Bridal Flower (3)	A. DeLara	114	39,000
1927	One Hour	G. Fields	118	3,850					

*Dead heat. †First division. ‡Second division.

BELMONT STAKES

Belmont Park; 3-year-olds; 1½ miles.

at Jerome Park prior to 1890; run at Morris Park from 1890 to 1905. Distance 1½ miles prior to 1874; increased to 1½ miles, 1874; reduced to 1¼ miles, 1890; changed to 1½ miles, 1893; increased to 1¼ miles, 1895; increased to 1½ miles, 1896; changed to 1¼ miles in 1904 and 1905; increased to 1½ miles, 1926.

Winner	Jockey	Wt. Win val.	Year	Winner	Jockey	Wt. Win val.
Unlabeled	J. Gilpatrick	107 \$1,850	1906	Burgomaster	L. Lyne	126 22,700
General Duke	R. Swim	110 2,800	1907	Peter Pan	G. Mountain	126 22,765
Benjamin	C. Miller	110 3,350	1908	Colin	J. Notter	126 22,765
Angfisher	W. Dick	110 3,750	1909	Joe Madden	E. Dugan	126 24,550
Harry Bassett	W. Miller	110 5,450	1910	Sweep	J. Butwell	126 9,700
Joe Daniels	J. Rowe	110 4,500	1913	Prince Eugene	R. Troxler	109 2,825
Springbok	J. Rowe	110 5,200	1914	Luke McLuke	M. Buxton	126 3,025
Maxon	G. Bardee	110 4,200	1915	The Finn	G. Byrne	126 1,825
Alvin	R. Swim	110 4,450	1916	Friar Rock	E. Haynes	126 4,100
Agnerine	W. Donohue	110 3,700	1917	Hourless	J. Butwell	126 5,800
Overbrook	C. Holloway	110 5,200	1918	Johren	F. Robinson	126 8,950
Duke of Magenta	L. Hughes	118 3,850	1919	Sir Barton	J. Loftus	126 11,950
Spindthrift	S. Evans	118 4,250	1920	Man o' War	C. Kummer	126 7,950
Renada	L. Hughes	118 2,800	1921	Grey Lag	E. Sande	126 8,650
Sauterter	T. Costello	118 3,000	1922	Pillory	C. H. Miller	126 39,200
Prester	J. McLaughlin	118 2,600	1923	Zev	E. Sande	126 38,000
George Kinney	J. McLaughlin	118 3,070	1924	Mad Play	E. Sande	126 42,880
Anique	J. McLaughlin	118 3,150	1925	American Flag	A. Johnson	126 38,500
Pyrant	P. Duffy	118 2,710	1926	Crusader	A. Johnson	126 48,550
Inspector B.	J. McLaughlin	118 2,720	1927	Chance Shot	E. Sande	126 60,910
Anover	J. McLaughlin	118 2,900	1928	Vito	C. Kummer	126 63,430
Dir Dixon	J. McLaughlin	118 3,440	1929	Blue Larkspur	M. Garner	126 59,650
Eric	W. Hayward	118 4,960	1930	Gallant Fox	E. Sande	126 66,040
Urlington	S. Barnes	118 8,560	1931	Twenty Grand	C. Kurtzinger	126 58,770
Woxford	E. Garrison	118½ 5,070	1932	Faireno	T. Malley	126 55,120
atron	W. Hayward	122 6,610	1933	Hurryhoff	M. Garner	126 49,490
omanche	W. Simms	117 5,310	1934	Peace Chance	W. D. Wright	126 43,410
Henry of Navarre	W. Simms	117 6,680	1935	Omaha	W. Saunders	126 35,480
elmar	F. Taral	119 2,700	1936	Granville	J. Stout	126 29,800
astings	H. Griffin	122 3,025	1937	War Admiral	C. Kurtzinger	126 38,020
ottish Chieftain	J. Scherrer	115 3,550	1938	Pasteurized	J. Stout	126 34,530
owling Brook	F. Littlefield	122 7,810	1939	Johnstown	J. Stout	126 37,020
ean Bereaud	R. Clawson	122 9,445	1940	Bimelech	F. A. Smith	126 35,030
ldrim	N. Turner	126 14,790	1941	Whirlaway	E. Arcaro	126 39,770
ommando	H. Spencer	126 11,595	1942	Shut Out	E. Arcaro	126 44,520
Masterman	J. Bullman	126 13,220	1943	Count Fleet	J. Longden	126 35,340
Africanader	J. Bullman	126 12,285	1944	Bounding Home	G. L. Smith	126 55,000
Delhi	G. Odom	126 11,575	1945	Pavot	E. Arcaro	126 52,675
Tanya	E. Hildebrand	121 17,240	1946	Assault	W. Mehrtens	126 75,400

BROOKLYN HANDICAP

Aqueduct; 3-year-olds and over; 1¼ miles.

at Belmont Park in 1913 and at Gravesend prior to 1911. Distance 1¼ miles prior to 1915. Distance 1½ miles from 1915 to 1939, inclusive.

Winner, age	Jockey	Wt. Win val.	Year	Winner, age	Jockey	Wt. Win val.
Dry Monopole (4)	A. McCarthy	106 \$5,850	1908	Celt (3)	J. Notter	106 19,750
The Bard (5)	W. Hayward	125 6,925	1909	King James (4)	E. Dugan	126 3,850
Exile (7)	A. Hamilton	116 6,900	1910	Fitz Herbert (4)	E. Dugan	130 4,800
Castaway II. (4)	W. Bunn	100 6,900	1913	Whisk Broom II (6)	J. Notter	130 3,125
Tenny (5)	Barnes	128 14,800	1914	Buckhorn (5)	J. McCahey	113 3,350
Judge Morrow (5)	A. Covington	116 17,750	1915	Tartar (5)	J. McTaggart	103 3,850
Diablo (7)	F. Taral	112 17,750	1916	Friar Rock (3)	E. Haynes	108 3,850
Dr. Rice (4)	F. Taral	112 17,750	1917	Borrow (9)	W. Knapp	117 4,850
Hornpipe (4)	A. Hamilton	105 7,750	1918	Cudgel (4)	L. Lyke	129 4,850
Sir Walter (6)	F. Taral	113 7,750	1919	Eternal (3)	A. Schuttinger	105 4,850
Howard Mann (4)	H. Martin	106 7,750	1920	Cirrus (4)	L. Ensor	108 5,850
Ornament (4)	T. Sloan	127 7,800	1921	Grey Lag (3)	L. Fator	112 7,600
Banastar (4)	D. Maher	110 7,800	1922	Exterminator (7)	A. Johnson	135 7,600
Kinley Mack (4)	P. McCue	122 7,800	1923	Little Chief (4)	E. Sande	114 7,600
Conroy (3)	W. O'Connor	102½ 7,800	1924	Hephaistos (5)	J. Maiben	106 7,600
Reina (4)	W. O'Connor	104 7,800	1925	Mad Play (4)	L. Fator	123 7,600
Irish Lad (3)	F. O'Neill	103 14,950	1926	Single Foot (4)	C. Turner	110 11,950
The Picket (4)	E. Helgesen	119 15,800	1927	Peanuts (5)	H. Thurber	112 13,150
Delhi (4)	T. Burns	124 15,800	1928	Black Panther (4)	J. Maiben	105 13,750
Tokalon (5)	W. Bedell	108 15,800	1929	Light Carbine (6)	G. Rose	97 14,300
Superman (3)	W. Miller	99 15,800	1930	Sortie (5)	P. Walls	111 10,800

Brooklyn Handicap—(cont.)

1931 Questionnaire (4).....	R. Workman.....	127	13,900	1939 Cravat (4).....	B. James.....	126	18,250
1932 Blenheim (4).....	H. Mills.....	109	9,800	1940 Isolator (7).....	J. Stout.....	119	16,900
1933 Dark Secret (4).....	H. Mills.....	115	3,380	1941 Fenelon (4).....	J. Stout.....	119	19,250
1934 Discovery (3).....	J. Bejshak.....	113	2,925	1942 Whirlaway (4).....	G. Woolf.....	128	23,650
1935 Discovery (4).....	J. Bejshak.....	123	10,200	1943 Devil Diver (4).....	S. Brooks.....	123	23,200
1936 Discovery (5).....	L. Fallon.....	136	10,575	1944 Four Freedoms (4).....	E. Arcaro.....	116	39,720
1937 Seabiscuit (4).....	J. Pollard.....	122	18,025	1945 Styxie (4).....	R. Permane.....	116	39,120
1938 The Chief (3).....	J. Longden.....	105	18,450	1946 Gallorette (4).....	J. Jessop.....	118	41,000

BUTLER HANDICAP

Empire City; 3-year-olds and over; 1 3/16 miles.

Distance 1 1/8 miles in 1935. Run at Jamaica from 1943 to 1946, inclusive.

Year	Winner, age	Jockey	Wt.	Win val.	Year	Winner, age	Jockey	Wt.	Win val.
1935	Discovery (4).....	J. Bejshak.....	132	\$11,675	1941	Foxbrough (5).....	J. Stout.....	118	19,800
1936	Good Gamble (4).....	L. Fallon.....	119	9,975	1942	Tola Rose (5).....	W. Mehrtens.....	103	22,800
1937	Seabiscuit (4).....	J. Pollard.....	126	18,025	1943	Thumbs Up (4).....	O. Grohs.....	116	23,300
1938	Esposa (6).....	N. Wall.....	114	19,400	1944	First Fiddle (5).....	J. Longden.....	126	38,225
1939	Lovely Night (3).....	N. Wall.....	104	16,950	1945	Stymie (4).....	R. Permane.....	121	38,775
1940	Can't Wait (5).....	B. James.....	111	21,000	1946	Lucky Draw (5).....	H. Woodhouse.....	105	39,900

CHESAPEAKE STAKES

Havre de Grace; 3-year-olds; 1 1/16 miles

Distance 1 mile and 70 yards in 1920 and 1921. Run at Pimlico in 1944.

Year	Winner	Jockey	Wt.	Win val.	Year	Winner	Jockey	Wt.	Win val.
1920	Sandy Beal.....	J. Butwell.....	112	\$3,550	1933	Mr. Khayyam.....	P. Walls.....	114	7,475
1921	Careful.....	C. Turner.....	111	3,450	1934	Cavalcade.....	M. Garner.....	119	6,750
1922	Bunting.....	L. Morris.....	121	3,325	1935	Plat Eye.....	S. Coucci.....	119	6,800
1923	Wilderness.....	J. Butwell.....	118	3,750	1936	Gold Seeker.....	M. Peters.....	109	8,425
1924	Nautical.....	J. Wallace.....	114	3,350	1937	War Admiral.....	C. Kurtsinger.....	119	8,200
1925	Sweeping Away.....	J. Maiben.....	114	8,275	1938	Bourbon King.....	R. Workman.....	116	12,700
1926	Rock Man.....	F. Coltiletti.....	122	8,000	1939	Gilded Knight.....	R. Donoso.....	114	12,800
1927	Whiskery.....	L. Schaefer.....	116	9,025	1940	Pictor.....	G. Woolf.....	116	12,800
1928	Bobashela.....	H. Fisher.....	110	9,250	1941	Porter's Cap.....	L. Haas.....	122	12,600
1929	Voltear.....	E. Legere.....	119	9,150	1942	Colchis.....	G. Woolf.....	116	13,500
1930	Sweet Sentiment.....	P. McGinnis.....	114	10,150	1944	Gramps Image.....	L. Bowers.....	114	24,700
1931	Anchors Aweigh.....	C. Kurtsinger.....	114	9,950	1946	Hampden.....	E. Arcaro.....	114	19,450
1932	Evening.....	R. Leischman.....	111	10,850					

CLASSIC STAKES

Arlington Park; 3-year-olds; 1 1/4 miles.

Run at Washington Park in 1943 and 1944.

Year	Winner	Jockey	Wt.	Win val.	Year	Winner	Jockey	Wt.	Win val.
1929	Blue Larkspur.....	M. Garner.....	126	\$59,900	1938	Nedayr.....	W. D. Wright.....	121	27,500
1930	Gallant Fox.....	E. Sande.....	126	64,750	1939	Challedon.....	H. Richards.....	126	35,600
1931	Mate.....	A. Robertson.....	126	73,650	1940	Sirocco.....	G. Woolf.....	121	37,930
1932	Gusto.....	S. Coucci.....	126	76,600	1941	Attention.....	C. Bierman.....	121	42,400
1933	Inlander.....	R. Jones.....	118	32,755	1942	Shut Out.....	E. Arcaro.....	126	69,700
1934	Cavalcade.....	M. Garner.....	126	30,325	1943	Slide Rule.....	F. Zufelt.....	120	53,450
1935	Omaha.....	W. D. Wright.....	126	28,975	1944	Twilight Tear.....	L. Haas.....	114	62,050
1936	Granville.....	J. Stout.....	126	28,400	1945	Pot o' Luck.....	D. Dodson.....	119	67,150
1937	Flying Scot.....	J. Gilbert.....	123	27,375	1946	The Duke.....	M. Duhon.....	119	76,850

COWDIN STAKES

Aqueduct; 2-year-olds; 6 1/2 furlongs.

Distance 1 mile prior to 1935. Run as Junior Champion Stakes prior to 1941.

Year	Winner	Jockey	Wt.	Win val.	Year	Winner	Jockey	Wt.	Win val.
1923	Mr. Mutt.....	H. Thurber.....	105	\$7,850	1935	Ned Reigh.....	R. Workman.....	115	6,970
1924	Star Lore.....	C. Ponce.....	109	8,500	1936	Pompoon.....	H. Richards.....	119	5,530
1925	Mars.....	H. Richards.....	108	7,550	1937	Can't Wait.....	L. Balaski.....	114	8,700
1926	Bonnie Maginn.....	D. McAuliffe.....	109 1/2	8,350	1938	El Chico.....	N. Wall.....	122	10,000
1927	Nixie.....	P. Goodwin.....	113	8,800	1939	Merry Knight.....	R. Nash.....	114	11,200
1928	Perkins.....	H. Thurber.....	111	7,850	1940	King Cole.....	J. Stout.....	118	9,450
1929	Gallant Fox.....	J. Maiben.....	116	8,000	1941	Requested.....	J. Westrope.....	118	9,550
1930	Twenty Grand.....	C. Kurtsinger.....	111	8,750	1942	Slide Rule.....	C. McCreary.....	120	8,975
1931	Faireno.....	T. Malley.....	116	4,680	1943	Alorter.....	J. Deering.....	115	15,250
1932	Repaid.....	P. Walls.....	112	9,290	1944	Best Effort.....	T. Atkinson.....	120	20,565
1933	First Minstrel.....	S. Coucci.....	113	2,020	1945	Knockdown.....	D. Dodson.....	114	22,550
1934	Sailor Beware.....	R. Workman.....	116	3,990	1946	Cosmic Bomb.....	R. Donoso.....	126	22,600

DIXIE HANDICAP

Pimlico; 3-year-olds and over; 1 3/16 miles

as Dinner Party Stakes in 1870. Run as Reunion Stakes in 1871. Run as Dixie Stakes from 1872 to inclusive. Distance 2 miles and for 3-year-olds prior to 1924.

Winner, age	Jockey	Wt.	Win val.	Year	Winner, age	Jockey	Wt.	Win val.
Weakness	Hayward	110	\$6,400	1926	Sarazen (5)	F. Weiner	128	24,550
erry Bassett	Rowe	110	6,500	1927	Mars (4)	F. Coliletti	124	26,375
bbard	McCabe	110	13,200	1928	Mike Hall (4)	H. Richards	110	24,975
m Bowling	Swim	110	4,000	1929	Diavolo (4)	J. Maiben	112	27,600
ndalite	Houston	107	13,200	1930	Sandy Ford (4)	F. Catrone	106	26,025
m Ochiltree	Evans	110	4,350	1931	Paul Bunyan (5)	E. Gianelloni	110	15,425
gil	Spillman	110	4,300	1932	Gallant Knight (5)	H. Schutte	121	14,550
ng Faro	Walker	110	4,450	1933	Stepenfetich (4)	E. Steffen	113	5,100
uke of Magenta	Hughes	110	4,200	1934	Equipoise (6)	R. Workman	112	4,190
onitor	Hughes	107	4,850	1935	Only One (4)	R. Merritt	130	4,520
enada	Hughes	110	4,200	1936	Dark Hope (7)	R. Jones	108	9,500
ickmore	Hughes	107	3,550	1937	Calumet Dick (5)	J. Wagner	113	9,450
onarch	Schauer	110	3,500	1938	Pompoon (4)	G. Woolf	108	20,950
orge Kinney	J. McLaughlin	110	3,600	1939	Sir Damion (5)	D. Meade	118	22,025
rtin	Stoval	112½	3,595	1940	Honey Cloud (6)	H. Mora	115	18,250
st Lynne	W. Donohue	115	3,595	1941	Halat (4)	C. McCreary	110	19,850
ee Bard	W. Hayward	118	3,290	1942	Whirlaway (4)	E. Arcaro	128	19,275
nover	J. McLoughlin	123	4,560	1943	Riverland (5)	S. Brooks	123	17,775
ragon	W. Hayward	123	4,040	1944	Sun Again (5)	F. A. Smith	120	25,700
macolet (6)	M. Garner	116	24,840	1945	Rounders (6)	F. Remerscheid	118	25,400
arazen (4)	E. Sande	130	25,950	1946	Armed (5)	D. Dodson	130	25,700

DWYER STAKES

Aqueduct; 3-year-olds; 1¼ miles.

nce 1½ miles in 1887, from 1898 to 1909, inclusive; from 1926 to 1934, inclusive. 1½ miles in 1925, les from 1915 to 1924, inclusive; and from 1935 to 1939, inclusive. Run at Gravesend from 1887 to 1910, e; and at Belmont Park in 1913. Run as Brooklyn Derby prior to 1918.

Winner	Jockey	Wt.	Win val.	Year	Winner	Jockey	Wt.	Win val.
nover	McLaughlin	118	\$2,675	1918	War Cloud	Buxton	124	4,850
uperior of Norfolk	Murphy	118	3,740	1919	Purchase	Knapp	118	4,850
nosure	Fitzpatrick	118	4,790	1920	Man o' War	Kummer	126	4,850
urlington	Barnes	118	6,960	1921	Grey Lag	Sande	123	7,100
ussell	Taylor	122	5,270	1922	Ray Jay	Ponce	117	7,150
atron	Hayward	122	5,240	1923	Dunlin	Lang	123	7,150
ainbow	Littlefield	122	4,350	1924	Ladkin	Maiben	123	7,750
obbins	Simms	122	5,340	1925	American Flag	Johnson	126	8,900
enan	Griffin	122	4,640	1926	Crusader	Sande	123	15,000
andspring	Doggett	122	7,800	1927	Kentucky II	Maiben	108	18,500
tagon	Simms	122	7,960	1928	Genie	Kelsay	110	19,600
ne Huguenot	Spencer	122	7,750	1929	Grey Coat	O'Donnell	117	19,450
rom	Martin	119	7,750	1930	Gallant Fox	Sande	126	11,500
etruchio	Spencer	108	8,475	1931	Twenty Grand	Kurtsinger	126	11,500
onibert	Spencer	112	7,750	1932	Faireno	Malley	124	12,200
ajor Daingerfield	Odom	118	7,750	1933	War Glory	Gilbert	118	4,250
horler	O'Neill	118	7,750	1934	Rose Cross	Coucci	116	4,090
ryn Mawr	Lynne	118	10,000	1935	Omaha	Wright	126	9,200
airngorm	Davis	118	5,390	1936	Mr. Bones	Gilbert	119	8,500
elmere	O'Neil	118	9,475	1937	Strabo	Renick	116	10,750
eter Pan	Miller	126	10,475	1938	The Chief	Woolf	119	8,900
air Play	Dugan	114	13,350	1939	Johnstown	Stout	126	9,250
oe Madden	Dugan	126	9,225	1940	Your Chance	Wright	116	9,650
almatian	Shilling	122	2,300	1941	Whirlaway	Arcaro	126	8,075
ock View	McTaggart	123	2,150	1942	Valdina Orphan	Bierman	116	21,150
oamer	Butwell	117	2,300	1943	Vincentive	Gilbert	111	19,600
orse King	Butwell	111	2,275	1944	By Jimminy	Atkinson	114	39,170
hicle	McTaggart	116	2,950	1945	Wildlife	Atkinson	116	38,835
mar Khayyam	Collins	125	3,850	1946	Assault	Mehrtens	126	40,700

FAMOUS HORSE RACING COLORS

r Stud—White, red spots, scarlet cap.
 ley, E. R.—White, green hoops, white
 eves, green cap.
 n, W. L.—Red, yellow blocks, red
 eves and cap.
 met Farm—Devil's red, blue collar,
 ae hoops on sleeves, blue cap.

Foxcatcher Farm—Sapphire blue, gold fox
 front and back, blue cap.
 Greentree Stable—Pink, black stripes on
 sleeves, black cap.
 Howard, C. S.—Red, white 'H' in triangle
 front and back, white sleeves, red and
 white cap.

EMPIRE CITY STAKES

Empire City; 3-year-olds; 1 3/16 miles.

Run at 1 mile in 1907; run at Belmont Park in 1915. Distance 1 1/4 miles in 1900 and from 1923 to 1933; 1 1/2 miles from 1934 to 1941, inclusive. For 3-year-olds and over prior to 1937. Run as a handicap prior to 1944 run at Jamaica from 1943 to 1946, inclusive.

Year	Winner, age	Jockey	Wt.	Win val.	Year	Winner, age	Jockey	Wt.	Win val.
1900	Charentus (6)	W. Shaw	106	\$2,465	1928	Recreation (4)	P. Goodwin	100	6,250
1907	Prince Ahmed (3)	Ott.	109	1,660	1929	Sun Edwin (4)	L. McAtee	118	6,250
1908	Pinkola (3)	J. Butler	105	11,800	1930	Frisius (4)	A. Abel	106 1/2	5,000
1909	Maltbie (4)	Page	106	3,850	1931	Questionnaire (4)	R. Workman	128	5,000
1910	Dalmatian (3)	G. Archibald	118	4,850	1932	Blenheim (4)	H. Mills	117	3,950
1914	Buckhorn (5)	J. McCahey	120	3,200	1933	Dark Secret (4)	J. Gilbert	120	1,800
1915	Gainer (4)	T. McTaggart	109	2,775	1934	Faireno (5)	J. Stout	114	4,450
1916	Short Grass (8)	F. Keogh	127	3,500	1935	Top Row (4)	J. Longden	115	7,900
1917	Spur (4)	W. Knapp	112	3,850	1936	Esposa (4)	R. Kastner	98	7,775
1918	Roamer (7)	L. Lyke	128	3,850	1937	Rex Flag	R. Merritt	106	10,900
1919	Lanius (4)	J. Loftus	115	3,850	1938	Stagehand	J. Westrope	124	9,450
1920	Naturalist (6)	C. Turner	117	4,650	1939	Lovely Night	N. Wall	116	9,800
1921	Yellow Hand (4)	C. H. Miller	115	7,000	1940	Fenelon	J. Stout	125	8,950
1922	Grey Lag (4)	L. Fator	132	6,550	1941	Swing and Sway	D. Meade	114	8,800
1923	Tryster (5)	E. Sande	115	6,400	1942	Apache	J. Stout	114	20,100
1924	Sting (3)	B. Breuning	98	8,100	1943	Chop Chop	J. Longden	120	19,350
1925	Mad Play (4)	L. Fator	129	7,100	1944	Stir Up	E. Arcaro	120	38,500
1926	Peanuts (4)	H. Richards	112	6,550	1945	Gallorette	T. Atkinson	116	39,500
1927	Peanuts (5)	H. Thurber	124	6,000	1946	Bonnie Beryl	E. Guerin	113	38,400

EPSOM DERBY

Epsom Downs, England; 3-year-olds; 1 mile, 885 yards.

Distance one mile prior to 1784. Distance 1 1/2 miles since 1939. Run at Newmarket from 1915 to 1918, inclusive, and from 1940 to 1945, inclusive, and called the New Derby Stakes.

Year	Owner	Winner	Win val.	Year	Owner	Winner	Win val.
1780	Sir C. Bunbury	Diomed	\$5,620	1820	Mr. Thornhill	Sailor	7,875
1781	Mr. O'Kelly	Y. Eclipse	6,255	1821	Mr. Hunter	Gustavus	7,875
1782	Lord Egremont	Assassin	5,500	1822	Duke of York	Moses	7,825
1783	Mr. Parker	Saltram	5,000	1823	Mr. Udny	Emilius	8,375
1784	Mr. O'Kelly	Sergeant	5,125	1824	Sir J. Shelley	Cedric	8,875
1785	Lord Clermont	Aimwell	4,375	1825	Lord Jersey	Middleton	9,000
1786	Mr. Panton	Noble	5,000	1826	Lord Egremont	Lap Dog	9,000
1787	Lord Derby	Sir P. Teazle	4,500	1827	Lord Jersey	Mameluke	13,500
1788	Prince of Wales	Sir Thomas	4,625	1828	Duke of Rutland	Cadland	13,000
1789	Duke of Bedford	Skyscraper	4,652	1829	Mr. Gratwicke	Frederick	12,750
1790	Lord Grosvenor	Rhadamanthus	4,750	1830	Mr. Chifney	Priam	13,500
1791	Duke of Bedford	Eager	4,625	1831	Lord Lowther	Spaniel	15,500
1792	Lord Grosvenor	John Bull	4,875	1832	Mr. Ridsdale	St. Giles	14,375
1793	Sir F. Poole	Waxy	6,500	1833	Mr. Saddler	Dangerous	17,625
1794	Lord Grosvenor	Daedalus	6,125	1834	Mr. Batson	Plenipotentiary	17,175
1795	Sir F. Standish	Spread Eagle	6,500	1835	Mr. Bowes	Mundig	16,750
1796	Sir F. Standish	Didelot	6,500	1836	Lord Jersey	Bay Middleton	18,000
1797	Duke of Bedford	Colt, by Fidget	5,000	1837	Lord Berner	Phosphorus	18,000
1798	Mr. Cookson	Sir Harry	5,375	1838	Sir G. Heatcote	Amato	18,250
1799	Sir F. Standish	Archduke	5,000	1839	Mr. W. Ridsdale	Bloomsbury	19,500
1800	Mr. Wilson	Champion	5,250	1840	Mr. Robertson	Little Wonder	19,125
1801	Sir C. Bunbury	Eleanor	4,375	1841	Mr. Rawlinson	Coronation	21,875
1802	Duke of Grafton	Tyrant	4,750	1842	Colonel Anson	Attila	24,500
1803	Sir H. Williamson	Ditto	4,625	1843	Mr. Bowes	Cotherstone	21,250
1804	Lord Egremont	Hannibal	4,625	1844	Colonel Peel	Orlando	21,750
1805	Lord Egremont	Card. Beaufort	6,250	1845	Mr. Gratwick	Merry Monarch	20,000
1806	Lord Foley	Paris	5,875	1846	Mr. Gully	Pyrrhus the First	26,500
1807	Lord Egremont	Election	5,875	1847	Mr. Pedley	Cossack	26,500
1808	Sir H. Williamson	Pan	5,500	1848	Lord Clifton	Surplice	28,000
1809	Duke of Grafton	Pope	6,375	1849	Lord Eglinton	T. Flying Dutchman	31,875
1810	Duke of Grafton	Whalebone	6,500	1850	Lord Zetland	Voltigeur	29,375
1811	Sir J. Shelly	Phantom	7,500	1851	Sir J. Hawley	Teddington	26,875
1812	Mr. Ladbrook	Octavius	7,125	1852	Mr. Bowes	Dan. O'Rourke	24,375
1813	Sir C. Bunbury	Smolensko	7,375	1853	Mr. Bowes	W. Australian	26,500
1814	Lord Stawell	Blucher	7,125	1854	Mr. Gully	Andover	29,250
1815	Duke of Grafton	Whisker	7,500	1855	F. Popham	Wild Dayrell	24,125
1816	Duke of York	Prince Leopold	7,250	1856	Admiral Harcourt	Elintive	28,125
1817	Mr. Payne	Azor	8,625	1857	W. l'Anson	Blink Bonny	27,750
1818	Mr. Thornhill	Sam	8,500	1858	Sir J. Hawley	Beadsman	26,615
1819	Duke of Portland	Tiresias	8,250	1859	Sir J. Hawley	Musjid	33,250

Epsom Derby—(cont.)

Owner	Winner	Win val.	Year	Owner	Winner	Win val.
Mr. Merry	Thormanby	30,500	1903	Sir J. Miller	Rock Sand	32,500
Colonel Towneley	Kettledrum	30,500	1904	L. de Rothschild	St. Amant	32,250
Mr. Snewing	Caractacus	32,125	1905	Lord Rosebery	Cicero	32,250
C. Naylor	Macaroni	34,500	1906	Maj. E. Loder	Spearmint	32,250
Mr. Anson	Blair Athol	32,500	1907	R. Croker	Orby	32,250
Ant F. de Lagrange	Gladiateur	34,375	1908	Chev. Ginistrelli	Signorinetta	32,250
Sutton	Lord Lyon	37,750	1909	King Edward	Minoru	32,250
Mr. Chaplin	Hermit	35,000	1910	Mr. Fairie	Lemberg	32,250
Mr. J. Hawley	Blue Gown	34,000	1911	J. B. Joel	Sunstar	32,250
Johnstone	Pretender	31,125	1912	W. Raphael	Tagalie	32,250
Lord Falmouth	Kingcraft	38,875	1913	A. P. Cunliffe	Aboyeur	32,250
De Rothschild	Favonius	25,625	1914	H. B. Duryea	Durbar II	32,250
Savile	Cremorne	24,250	1915	S. Joel	Pommern	12,000
Mr. Merry	Doncaster	24,125	1916	E. Hulton	Fiffinella	14,500
S. Cartwright	Geo. Frederick	26,750	1917	Mr. Fairie	Gay Crusader	10,250
Prince Bathany	Galopin	24,750	1918	Lady Jas. Douglas	Gainsborough	20,000
Baltazzi	Kisber	27,875	1919	Lord Glanely	Grand Parade	32,250
Lord Falmouth	Silbio	30,250	1920	Maj. G. Loder	Spion Kop	32,250
S. Crawford	Sefton	29,125	1921	J. B. Joel	Humorist	32,250
Mr. Acton	Sir Bevvys	35,125	1922	Lord Woolavington	Captain Cuttle	51,250
of Westminster	Bend Or	31,875	1923	Ben Irish	Papyrus	56,800
Lorillard	Iroquois	29,625	1924	Lord Derby	Sansovino	59,025
of Westminster	Shotover	23,875	1925	H. E. Morris	Manna	55,475
Mr F. Johnstone	St. Blaise	25,750	1926	Lord Woolavington	Coronach	51,750
Hammond	St. Gatten		1927	Frank Curzon	Call Boy	63,075
Mr J. Willoughby	Harvester	24,500	1928	Sir H. C'cliffe-Owen	Felstead	58,025
Lord Hastings	Melton	22,625	1929	W. Barnett	Trigo	59,825
of Westminster	Ormonde	23,500	1930	H. H. Aga Khan	Blenheim	50,180
Mr. Abington	Mer. Hampton	22,625	1931	J. A. Dewar	Cameronian	48,640
Duke of Portland	Ayrshire	18,375	1932	T. Walls	April the Fifth	34,056
Duke of Portland	Donovan	20,250	1933	Lord Derby	Hyperion	49,182
Mr J. Miller	Sainfoin	29,700	1934	H. H. M. of Raj'pla	Windsor Lad	46,760
Mr F. Johnstone	Common	27,550	1935	H. H. Aga Khan	Bahram	46,080
Lord Bradford	Sir Hugo	34,900	1936	H. H. Aga Khan	Mahmoud	49,670
Mr. McCalmont	Isinglass	27,575	1937	Mrs. G. B. Miller	Mid-Day Sun	47,205
Lord Rosebery	Ladas	27,250	1938	P. Beatty	Bois Roussel	43,644
Lord Rosebery	Sir Visto	27,250	1939	Lord Rosebery	Blue Peter	42,680
Prince of Wales	Persimmon	27,250	1940	F. Darling	Pont l'Evêque	23,803
Mr. Gubbins	Galtee More	27,250	1941	Mrs. M'D'ald-Buc'n	Owen Tudor	18,003
Larnach	Jeddah	27,250	1942	Lord Derby	Watling Street	15,530
of Westminster	Flying Fox	27,250	1943	Miss Dorothy Paget	Straight Lead	17,552
Prince of Wales	Diamond Jubilee	27,250	1944	Lord Rosebery	Ocean Swell	23,604
V. C. Whitney	Volodyovskij	28,350	1945	Sir Eric Ohlson	Dante	33,356
Gubbins	Ard Patrick	27,250	1946	J. E. Ferguson	Airborne	32,000

Heat; stake divided. †American bred or owned.

FLAMINGO STAKES

Hialeah Park; 3-year-olds; 1 1/4 miles

Run at Tampa in 1926. Run as Florida Derby prior to 1937.

Winner	Jockey	Wt.	Win val.	Year	Winner	Jockey	Wt.	Win val.
Torch	H. Griffin	117	\$4,450	1937	Court Scandal	E. Steffen	120	20,900
Opset Lad	J. H. Burke	118	8,600	1938	Lawrin	W. D. Wright	120	20,100
Titus	A. Robertson	118	9,900	1939	Technician	I. Hanford	118	20,000
Lightning Bolt	C. Kurtsinger	118	10,800	1940	Woof Woof	I. Anderson	118	22,450
Evening	R. Leischman	113	9,725	1941	Dispose	A. Robertson	120	20,200
Charley O	J. Gilbert	118	10,475	1942	Requested	E. Arcaro	122	28,150
Time Clock	M. Garner	114	10,075	1944	Stir Up	E. Arcaro	118	14,825
Black Helen	D. Meade	113	15,600	1946	Round View	L. Hildebrandt	118	29,600
Brevity	W. D. Wright	120	20,050					

Outstanding Riding Performances

Among the winners of the entire card of six races at Churchill Downs, June 5, 1910, James Lee, the colored jockey, established a world's record. This mark stood until Albert Whittaker rode all seven winners at Huntley, New Zealand, February 1910. Thomas rode all seven winners at

Townsville, Australia, July 29, 1929. In this country, H. Phillips duplicated Lee's feat at Reno, July 5, 1916. At Marlboro, September 11, 1930, Albert Adams had six mounts and won with all. At Ravenna Park (Ohio), October 18, 1930, J. Sylvester rode in all eight races on the program and earned brackets in seven.

FUTURITY STAKES

Belmont Park; 2-year-olds; 6½ furlongs

Distance 1,263 yards 1 foot from 1892 to 1901, inclusive. Distance ¾ mile prior to 1892 and from 1902 to 1924 inclusive; about 7/8 mile from 1925 to 1933, inclusive. Run at Sheepshead Bay until 1910. Run at Saratoga by special arrangement in 1910, 1913 and 1914.

Year	Winner	Jockey	Wt.	Win val.	Year	Winner	Jockey	Wt.	Win val.
1888	Proctor Knott	S. Barnes	112	\$40,900	1919	Man o' War	J. Loftus	127	26,650
1889	Chaos	G. Day	109	54,500	1920	Step Lightly	F. Keogh	116	35,800
1890	Potomac	A. Hamilton	115	67,675	1921	Bunting	F. Colfietti	117	39,000
1891	His Highness	J. McLaughlin	130	61,675	1922	Sally's Alley	A. Johnson	116	47,000
1892	Morello	W. Hayward	118	40,450	1923	St. James	T. McTaggart	130	64,000
1893	Domino	F. Taral	130	48,855	1924	Mother Goose	L. McAtee	114	65,700
1894	The Butterflies	H. Griffin	112	48,710	1925	Pompey	L. Fator	127	58,400
1895	Requital	H. Griffin	115	53,190	1926	Scapa Flow	L. Fator	122	65,800
1896	Ogden	F. Turbiville	115	43,790	1927	Anita Peabody	C. Lang	124	91,700
1897	L'Alouette	R. Clawson	115	34,290	1928	High Strung	L. McAtee	122	97,800
1898	Martimas	H. Lewis	118	36,610	1929	Whichone	R. Workman	125	105,700
1899	Chacornac	H. Spencer	114	30,630	1930	Jamestown	L. McAtee	130	99,600
1900	Ballyhoo Bey	T. Sloan	112	33,580	1931	Top Flight	R. Workman	127	94,700
1901	Yankee	W. O'Connor	119	36,850	1932	Kerry Patch	P. Walls	122	88,600
1902	Savable	L. Lyne	119	44,500	1933	Singing Wood	R. Jones	122	81,700
1903	Hamburg Belle	G. Fuller	114	36,600	1934	Chance Sun	W. D. Wright	122	77,500
1904	Artful	E. Hildebrand	114	40,830	1935	Tintagel	S. Coucel	122	66,400
1905	Ormondale	A. Redfern	117	32,960	1936	Pompoon	H. Richards	127	55,500
1906	Electioneer	W. Shaw	117	36,880	1937	Menow	C. Kurlinger	119	56,900
1907	Colin	W. Miller	125	26,640	1938	Porter's Mite	B. James	119	57,040
1908	Maskette	J. Notter	118	26,110	1939	Bimelech	F. A. Smith	126	57,710
1909	Sweep	J. Butwell	126	24,100	1940	Our Boots	E. Arcaro	119	65,800
1910	Novelty	C. H. Shilling	127	25,360	1941	Some Chance	W. Eads	122	57,900
1911	Pennant	C. Borel	119	15,060	1942	Occupation	G. Woolf	126	57,800
1914	Trojan	C. Burlingame	117	16,010	1943	Occupy	G. Woolf	126	55,600
1915	Thunderer	J. Notter	122	16,590	1944	Pavot	G. Woolf	126	53,800
1916	Campfire	J. McTaggart	125	17,340	1945	Star Pilot	A. Kirkland	126	52,940
1917	Papp	L. Allen	127	15,600	1946	First Flight	E. Arcaro	123	73,350
1918	Dunboyne	A. Schuttinger	127	23,360					

GALLANT FOX HANDICAP

Jamaica; 3-year-olds and over; 1½ miles.

Year	Winner, age	Jockey	Wt.	Win val.	Year	Winner, age	Jockey	Wt.	Win val.
1939	Isolater (6)	J. Stout	119	\$ 8,400	1943	Eurasian (3)	H. Lindberg	116	19,700
1940	Salamina (3)	D. Meade	107	11,150	1944	Some Chance (5)	A. Snider	116	37,560
1941	Market Wise (3)	W. Eads	119	11,550	1945	Reply Paid (3)	H. Lindberg	108	39,100
1942	Dark Discovery (4)	W. Mehrtens	100	11,300	1946	Stymie (5)	B. James	126	59,050

GRAND NATIONAL STEEPLECHASE

Belmont Park; 4-year-olds and over; about 3 miles.

Run at Morris Park prior to 1905. Distance about 2½ miles prior to 1916.

Year	Winner, age	Jockey	Wt.	Win val.	Year	Winner, age	Jockey	Wt.	Win val.
1899	Trillion (8)	Mr. W. C. Hayes	163	\$ 6,150	1924	Dan IV (6)	N. Kennedy	158	4,100
1900	Philae (5)	Donahue	153	6,525	1925	Moseley (5)	C. Smoot	138	6,350
1901	Sacket (6)	Carson	137	6,100	1926	Erne II (5)	R. H. Crawford	149	6,550
1902	Geo. W. Jenkins (4)	Ray	133	5,525	1927	Jolly Roger (5)	R. H. Crawford	165	34,750
1903	Plohn (6)	Ray	141	6,050	1928	Jolly Roger (6)	R. H. Crawford	167	35,850
1904	St. Jude (4)	Ray	142	5,450	1929	Arc Light (5)	A. Bauman	151	34,450
1905	Mackey Dwyer (5)	Holman	149	5,210	1930	Tourist II (5)	W. Hunt	148	28,350
1906	Good and Plenty (6)	Ray	170	5,675	1931	Green Cheese (4)	Mr. R. McKinney	140	28,250
1907	Alfar (5)	Owens	143	5,500	1932	Tourist II (7)	G. Cooper	158	8,200
1908	Kara (5)	McAfee	138	4,775	1933	Best Play (4)	A. Bauman	132	4,850
1909	Sir Wooster (5)	Davidson	155	740	1934	Battleship (7)	Mr. C. K. Bassett	147	5,900
1910	Rossfenton (4)	W. Allen	138	1,275	1935	Snap Back (6)	W. N. Ball	137	6,050
1913	Penobscot (4)	Wolke	140	1,845	1936	Bushranger (6)	H. Little	172	5,750
1914	Relief (7)	T. Tuckey	157	1,650	1937	Sailor Beware (5)	H. Little	153	9,200
1915	Mission (6)	B. Haynes	148	1,785	1938	Annibal (5)	Mr. R. McKinney	156	8,100
1916	Hibler (7)	T. Parrette	140	1,860	1939	Whaddon Chase (4)	J. Penrod	146	9,300
1917	Expectation (6)	B. Haynes	144	1,895	1940	Cottesmore (5)	F. Slate	160	14,850
1918	St. Charlotte (6)	C. Smoot	158	1,755	1941	Speculate (5)	T. Roby	142	14,350
1919	Stonewood (7)	V. Powers	148	2,150	1942	Cottesmore (7)	F. Slate	155	13,950
1920	Square Dealer (6)	V. Powers	154	2,075	1943	Brother Jones (7)	G. Walker	150	14,500
1921	Earlocker (5)	W. Mahoney	142	3,675	1944	Burma Road (5)	J. Magee	136	13,380
1922	Lytle (8)	R. H. Crawford	132	3,575	1945	Mercator (6)	W. Owen	142	15,000
1923	Sea Tale (7)	J. Pierce	158	3,675	1946	Elkridge (8)	E. Roberts	151	21,420

GRAND NATIONAL STEEPLECHASE

Liverpool, England; 6-year-olds and over; 4 miles, 856 yards (Aintree Course)

Owner	Winner	Starters	Value	Year	Owner	Winner	Starters	Value
Elmore	Lottery	17		1892	C. G. Wilson	Father O'Flynn	25	8,400
Mr. Villebois	Jerry	12		1893	C. G. Duff	Cloister	15	9,825
Lord Craven	Charity	11		1894	Capt. C. H. Fenwick	Why Not	14	9,875
Elmore	Gaylad	15		1895	J. Widge	W. M. f. Borneo	19	9,875
Lord Chesterfield	Vanguard	16		1896	Lord Wavertree	The Soarer	28	9,875
Mr. Quartermaine	Pioneer	22		1897	H. M. Dyas	Manifesto	28	9,875
Mr. S. Crawford	Cure All	15		1898	C. G. Adams	Drogheda	25	9,875
Mr. Adams	Pioneer	22		1899	J. G. Bulteel	Manifesto	19	9,875
Mr. Courtenay	Matthew	26		1900	Prince of Wales	Ambush II	16	9,875
Capt. Little	Chandler	30		1901	B. Bletsoe	Grudon	24	9,875
Mr. S. Mason, Jr.	Peter Simple	24	\$4,025	1902	A. Gorham	Shannon Lass	21	10,000
Mr. Osborne	Abd el Kader	32		1903	J. S. Morrison	Drumcree	23	10,000
Mr. Osborne	Abd el Kader	21		1904	G. H. Gollan	Moifaa	26	10,000
Mr. F. Mason	Miss Mowbray	24	3,400	1905	F. Bibby	Kirkland	27	10,125
Capt. Little	Peter Simple	21		1906	Prince Hatzfeldt	Ascetic's Silver	23	10,875
Mr. Moseley	Bourton			1907	S. Howard	Eremon	23	12,000
Mr. Dennis	Wanderer	20		1908	Maj. F. Douglas-Pennant	Rubio†	24	12,000
Mr. Barnett	Freetrader	21		1909	J. Hennessy	Lutteur III	32	12,000
Hodgman	Emigrant	28	5,575	1910	S. Howard	Jenkinstown	25	12,000
Capel	Little Charley	16		1911	F. Bibby	Glenside	26	12,500
Mr. Willoughby	Half Caste	20	4,200	1912	Mr. C. G. Assheton-Smith	Jerry M	24	16,000
Capel	Anatis	19		1913	Sir C. G. Assheton-Smith	Covertcoat	22	15,850
Bennett	Jealousy	24	4,925	1914	T. Tyler	Sunloch	20	17,575
Miss C. de Namur	Huntsman	13		1915	Lady Nelson	Ally Sloper	20	17,575
Lord Coventry	Emblem	16	4,275	1916	*P. F. Heybourn	Bermouth	21	5,750
Lord Coventry	Emblematic	25		1917	*Sir G. Boulough	Ballymacad	19	6,025
J. Angell	Alciade	23	5,175	1918	*Mrs. H. Peel	Poethlyn	17	4,925
Mr. Studd	Salamander	30		1919	*Mrs. H. Peel	Poethlyn	22	17,950
Duke of Hamilton	Cortolvin	23	8,300	1920	Major Gerrard	Troytown	24	21,800
Lord Poulett	The Lamb	21	7,850	1921	T. McAlpine	Shaun Spadah	35	39,925
Mr. Weyman	The Colonel	22	8,800	1922	Hugh Kershaw	Music Hall	32	35,000
Mr. Evans	The Colonel	23	7,325	1923	Stephen Sanford	Sgt. Murphy†	28	36,100
Lord Poulett	The Lamb	25	8,325	1924	Lord Airlie	Master Rob't	30	40,825
Mr. Brayley	Casse Tete	25	7,275	1925	Major D. Goid	Double Chance	33	40,600
Capt. Machell	Disturbance	28	9,800	1926	C. Schwartz	Jack Horner	30	31,550
Capt. Machell	Reugny	22	9,450	1927	Mrs. M. Partridge	Sprig	37	41,075
Mr. Bird	Pathfinder	18	9,700	1928	H. S. Kenyon	Tiptery Tim	42	55,900
Capt. Machell	Regal	19	7,550	1929	Mrs. M. A. G'm'll	Gregalach	66	64,625
Mr. G. Hobson	Austerlitz	16	6,450	1930	W. Midwood	Shaun Gollin	41	48,650
Mr. Nightingall	Shifnal	12	8,450	1931	C. R. Taylor	Grakle	36	37,240
Mr. Moore	The Liberator	18	9,500	1932	W. Parsonage	Forbra	36	28,577
Mr. Ducrot	Empress	14	6,250	1933	Mrs. F. A. Clark	Kellsboro Jack†	34	36,725
Capt. Kirkwood	Woodbrook	13	4,900	1934	Miss D. Paget	Golden Miller	30	36,325
Lord Manners	Seaman	12	6,675	1935	Maj. Noel F'rlong	Reynoldstown	27	32,725
Prince C. Kinsky	Zoedone	10	4,625	1936	Maj. Noel F'rlong	Reynoldstown	35	35,100
Mr. F. Boyd	Voluptuary	15	5,175	1937	H. Lloyd Thomas	Royal Mail	33	33,225
Mr. Cooper	Roquefort	19	5,175	1938	Mrs. M. Scott	Battleship†	36	37,545
Mr. Douglas	Old Joe	23	6,805	1939	Sir A. Maguire	Workman	37	31,966
Mr. E. Jay	Gamecock	16	6,080	1940	Lord Stalbridge	Bogskar	30	16,887
Col. E. W. Baird	Playfair	20	5,905	1946	Jock Morant	Lovely Cottage	34	35,300
Mr. A. Maher	Frigate	20	6,170					
Mr. Masterman	Ilex	16	8,325					
W. G. Jameson	Come Away	21	8,400					

†Substitute race. †American bred or owned.

HAWTHORNE GOLD CUP

Hawthorne Park; 3-year-olds and over; 1¼ miles.

Light-for-age prior to 1937.

Winner, age	Jockey	Wt.	Win val.	Year	Winner, age	Jockey	Wt.	Win val.
Display (5)	J. Maiben	126	\$20,200	1935	Discovery (4)	J. Bejsbak	126	11,125
Sun Beau (4)	F. Coltiletti	126	21,900	1937	Sahri II (6)	F. A. Smith	110	11,125
Sun Beau (5)	F. Coltiletti	126	23,800	1938	Esposa (6)	N. Wall	120	10,825
Sun Beau (4)	J. Maiben	126	20,700	1939	Challedon (3)	H. Richards	120	10,900
Plucky Play (6)	G. Woolf	126	21,450	1946	Jack's Jill (4)	J. Higley	111	19,450
Equipoise (5)	R. Workman	126	17,250					

HOLLYWOOD GOLD CUP

Hollywood Park; 3-year-olds and over; 1 1/4 miles.

Year	Winner, age	Jockey	Wt.	Win val.	Year	Winner, age	Jockey	Wt.	Win val.
1938	Seabiscuit (5)	G. Woolf	133	\$37,150	1944	Happy Issue (4)	H. Woodhouse	119	60,600
1939	Kayak II (4)	G. Woolf	125	35,075	1945	Challenge Me (4)	A. Skoronski	108	48,230
1940	Challedon (4)	G. Woolf	133	36,200	1946	Triplicate (5)	B. James	113	79,900
1941	Big Pebble (5)	J. Westrope	119	62,475					

HOPEFUL STAKES

Saratoga; 2-year-olds; 6 1/2 furlongs.

Distance 3/4 mile prior to 1925; run at Belmont Park 1943 to 1945, inclusive.

Year	Winner	Jockey	Wt.	Win val.	Year	Winner	Jockey	Wt.	Win val.
1903	Delhi	C. Gannon	112	\$22,275	1926	Lord Chaucer	F. Coltiletti	115	48,850
1904	Tanya	E. Hildebrand	127	29,790	1927	Brooms	J. Maiben	115	55,750
1905	Mohawk II	A. Redfern	130	16,490	1928	Jack High	G. Ellis	127	54,100
1906	Peter Pan	W. Knapp	130	17,640	1929	Boojum	R. Workman	117	54,750
1907	Jim Gaffney	D. Nicol	115	17,500	1930	Epithet	W. Kelsay	117	55,000
1908	Helmet	J. Notter	115	10,990	1931	Tick On	P. Walls	117	45,980
1909	Rocky O'Brien	V. Powers	122	17,160	1932	Ladysman	R. Jones	130	41,400
1910	Novelty	A. Thomas	130	19,140	1933	Bazaar	D. Meade	119	35,550
1913	Bringinghurst	J. Loftus	113	4,100	1934	Psychic Bid	M. Garner	122	24,250
1914	Regret	J. Notter	127	9,590	1935	Red Rain	R. Workman	124	38,400
1915	Dominant	J. Notter	130	9,150	1936	Maedic	E. Litzenberger	122	32,600
1916	Campfire	J. McTaggart	130	18,850	1937	Sky Larking	A. Robertson	119	31,450
1917	Sun Briar	W. Knapp	130	30,600	1938	El Chico	N. Wall	126	42,550
1918	Eternal	A. Schuttinger	115	30,150	1939	Bimelech	F. A. Smith	122	33,750
1919	Man o' War	J. Loftus	130	24,600	1940	Whirlaway	J. Longden	122	37,850
1920	Leonardo II	A. Schuttinger	115	33,850	1941	Devil Diver	J. Skelly	119	35,950
1921	Morvich	A. Johnson	130	34,900	1942	Devil's Thumb	C. McCreary	122	31,750
1922	Dunlin	C. Kummer	115	38,950	1943	Bee Mac	S. Young	119	33,300
1923	Diogenes	C. Ponce	115	46,800	1944	Pavot	G. Woolf	126	51,775
1924	Master Charlie	G. Babin	130	48,700	1945	Star Pilot	A. Kirkland	112	55,100
1925	Pompey	L. Fator	127	42,850	1946	Blue Border	A. DeLara	122	46,450

JOCKEY CLUB GOLD CUP

Belmont Park; 3-year-olds and over; 2 miles.

Run at 1 1/4 miles in 1920.

Year	Winner, age	Jockey	Wt.	Win val.	Year	Winner, age	Jockey	Wt.	Win val.
1920	Man o' War (3)	C. Kummer	118	\$ 5,850	1934	Dark Secret (5)	C. Kurtsinger	125	6,200
1921	Mad Hatter (5)	E. Sande	125	12,100	1935	Firethorn (3)	E. Arcaro	117	6,550
1922	Mad Hatter (6)	E. Sande	125	12,700	1936	Count Arthur (4)	J. Stout	124	6,500
1923	Homestretch (3)	C. Lang	114	11,300	1937	Firethorn (5)	H. Richards	124	6,050
1924	My Play (5)	A. Schuttinger	125	14,150	1938	War Admiral (4)	W. D. Wright	124	5,500
1925	Altawood (4)	E. Sande	120	13,050	1939	Cravat (4)	B. James	124	5,550
1926	Crusader (3)	J. Maiben	114	13,300	1940	Fenelon (3)	J. Stout	114	6,700
1927	Chance Play (4)	E. Sande	125	12,000	1941	Market Wise (3)	B. James	114	7,325
1928	Reigh Count (3)	C. Lang	114	10,850	1942	Whirlaway (4)	G. Woolf	124	18,350
1929	Diavolo (4)	J. Maiben	125	10,900	1943	Princequillo (3)	C. McCreary	117	18,500
1930	Gallant Fox (3)	E. Sande	118 1/2	10,300	1944	Bolingbroke (7)	R. Permane	125	17,645
1931	Twenty Grand (3)	C. Kurtsinger	114	10,400	1945	Pot o' Luck (3)	D. Dodson	114	18,335
1932	Gusto (3)	B. Hanford	114	9,950	1946	Pavot (4)	E. Arcaro	124	18,250
1933	Dark Secret (4)	H. Mills	125	6,400					

Origin of Individual Racing Silks

The practice of using individual racing silks to distinguish horses is almost 200 years old. They were first introduced in October, 1762, at Newmarket, England, when a group of sportsmen conceived the unique idea. In the quaint phraseology of the time, "for the greater convenience of distinguishing horses in the running, as also for the prevention of disputes arising

from not knowing the colours worn by riders, seventeen gentlemen came to the decision to register their colours," and the stewards of the Newmarket meeting "hoped" in the name of the Jockey Club that the gentlemen "would take care that their riders be provided with dresses accordingly." Lord Grosvenor, the Lord Derby of that day, chose orange as his color.

KENTUCKY DERBY

Churchill Downs; 3-year-olds; 1 1/4 miles

Winner	Jockey	Wt.	Win val.	Year	Winner	Jockey	Wt.	Win val.
Aristides.....	O. Lewis.....	100	\$2,850	1911	Meridian.....	G. Archibald.....	117	4,850
Magrant.....	R. Swim.....	97	2,950	1912	Worth.....	C. H. Shilling.....	117	4,850
Baden Baden.....	W. Walker.....	100	3,300	1913	Donerail.....	R. Goose.....	117	5,475
Gay Star.....	J. Carter.....	100	4,050	1914	Old Rosebud.....	J. McCabe.....	114	9,125
Lord Murphy.....	C. Schauer.....	100	3,550	1915	Regret.....	J. Notter.....	112	11,450
Onso.....	G. Lewis.....	105	3,800	1916	George Smith.....	J. Loftus.....	117	9,750
Indoo.....	J. McLaughlin.....	105	4,410	1917	Omar Khayyam.....	C. Borel.....	117	16,600
Pollo.....	B. Hurd.....	102	4,560	1918	Exterminator.....	W. Knapp.....	114	14,700
Leonatus.....	W. Donohue.....	105	3,760	1919	Sir Barton.....	J. Loftus.....	112 1/2	20,825
uchanan.....	I. Murphy.....	110	3,990	1920	Paul Jones.....	T. Rice.....	126	30,375
De Cotton.....	E. Henderson.....	110	4,630	1921	Behave Yourself.....	C. Thompson.....	126	38,450
Ben Ali.....	P. Duffy.....	118	4,890	1922	Morvich.....	A. Johnson.....	126	46,775
Montrose.....	I. Lewis.....	118	4,200	1923	Zev.....	E. Sande.....	126	53,600
Macbeth II.....	G. Covington.....	115	4,740	1924	Black Gold.....	J. D. Mooney.....	126	52,775
Opokane.....	T. Kiley.....	118	4,970	1925	Flying Ebony.....	E. Sande.....	126	52,950
Kiley.....	I. Murphy.....	118	5,460	1926	Bubbling Over.....	A. Johnson.....	126	50,075
Kingman.....	I. Murphy.....	122	4,680	1927	Whiskery.....	L. McAtee.....	126	51,000
Azra.....	A. Clayton.....	122	4,230	1928	Reigh Count.....	C. Lang.....	126	55,375
Lookout.....	E. Kunze.....	122	4,090	1929	Clyde Van Dusen.....	L. McAtee.....	126	53,950
Chant.....	F. Goodale.....	122	4,020	1930	Gallant Fox.....	E. Sande.....	126	50,725
Alma.....	J. Perkins.....	122	2,970	1931	Twenty Grand.....	C. Kurtzinger.....	126	48,725
Ben Brush.....	W. Simms.....	117	4,850	1932	Burgoo King.....	E. James.....	126	52,350
Cyphoon II.....	F. Garner.....	117	4,850	1933	Brokers Tip.....	D. Meade.....	126	48,925
Claudit.....	W. Simms.....	117	4,850	1934	Cavalcade.....	M. Garner.....	126	28,175
Manuel.....	F. Taral.....	117	4,850	1935	Omaha.....	W. Saunders.....	126	39,525
Lieut. Gibson.....	J. Boland.....	117	4,850	1936	Bold Venture.....	I. Hanford.....	126	37,725
His Eminence.....	J. Winkfield.....	117	4,850	1937	War Admiral.....	C. Kurtzinger.....	126	52,050
Alan-a-Dale.....	J. Winkfield.....	117	4,850	1938	Lawrin.....	E. Arcaro.....	126	47,050
Judge Himes.....	H. Booker.....	117	4,850	1939	Johnstown.....	J. Stout.....	126	46,350
Elwood.....	F. Prior.....	117	4,850	1940	Gallahadion.....	C. Bierman.....	126	60,150
Agile.....	J. Martin.....	122	4,850	1941	Whirlaway.....	E. Arcaro.....	126	61,275
Sir Huon.....	R. Troxler.....	117	4,850	1942	Shut Out.....	W. D. Wright.....	126	64,225
Pink Star.....	A. Minder.....	117	4,850	1943	Count Fleet.....	J. Longden.....	126	60,725
Stone Street.....	A. Pickens.....	117	4,850	1944	Pensive.....	C. McCreary.....	126	64,675
Wintergreen.....	V. Powers.....	117	4,850	1945	Hoop Jr.....	E. Arcaro.....	126	64,850
Donau.....	F. Herbert.....	117	4,850	1946	Assault.....	W. Mehrtens.....	126	96,400

MARYLAND HUNT CUP

Glyndon, Md.; 4-year-olds and over; about 4 miles

rophy to winner. Distance 4 1/2 miles in 1895; not given in 1896; 5 miles in 1897; 4 1/8 miles in 1900 and 1901.

Winner, age	Jockey	Wt.	Time	Year	Winner, age	Jockey	Wt.	Time
Johnny Miller.....	J. McHenry.....	.....	.....	1919	Chuckatuck (a).....	J. Spencer, Jr.....	165	10:45 1/4
Sixty.....	G. Elder.....	.....	.....	1920	Oracle 2nd (a).....	A. White.....	165	10:44
Kingsbury.....	T. D. Whistler.....	160	.....	1921	Mazarin (a).....	G. Thompson.....	165	.....
Little Giant.....	G. Elder.....	160	.....	1922	Oracle 2nd (a).....	R. Belmont.....	165	.....
The Squire.....	W. P. Stewart.....	160	.....	1923	Red Bug (a).....	C. Burton.....	165	.....
Reveller.....	J. Piper.....	160	12:31	1924	Daybreak (a).....	J. Ewing.....	165	9:41
Tom Clark.....	G. Brown, Jr.....	.....	12:00	1925	Burgoright (a).....	J. Bowen, Jr.....	165	9:48 3/4
Garry Owen.....	J. Spencer, Jr.....	.....	11:55	1926	Billy Barton (a).....	A. G. Ober, Jr.....	165	9:09 3/4
Garry Owen (a).....	J. Spencer, Jr.....	.....	10:12	1927	Bon Master (a).....	F. Bonsal, Jr.....	165	10:54
Princeton (a).....	W. Walters.....	.....	.....	1928	Bon Master (a).....	F. Bonsal, Jr.....	165	11:04
Landslide (6).....	R. C. Stewart.....	.....	.....	1929	Alligator (a).....	C. Plum.....	165	9:45 3/4
Princeton (a).....	S. Watters.....	.....	11:02	1930	Brose Hover (a).....	C. Burton.....	165	8:53 3/4
Princeton (a).....	W. Watters.....	165	.....	1931	Soissons (8).....	J. T. Skinner.....	165	9:09
Garry Owen (a).....	J. Spencer, Jr.....	165	.....	1932	Trouble Maker (9).....	N. Lang.....	165	8:53 3/4
Judge Parker (5).....	G. Nicholas.....	160	.....	1933	Captain Kettle (9).....	C. R. White.....	165	.....
Sacandaga (7).....	A. Devereux.....	165	.....	1934	Captain Kettle (10).....	C. R. White.....	165	9:04 3/4
Sacandaga (8).....	A. Devereux.....	165	11-06 1/4	1935	Hotspur 2nd (12).....	S. Janney, Jr.....	165	9:12 3/4
Pebbles (a).....	J. Leiper, Jr.....	150	.....	1936	Inshore (7).....	H. Frost, Jr.....	165	9:08 3/4
Conbe (5).....	G. Blakiston, Jr.....	160	10:38	1937	Welbourne Jake (7).....	J. Harrison.....	165	8:59
Zarda (a).....	G. Willing, Jr.....	165	.....	1938	Blockade (9).....	J. Colwill.....	165	8:44
Rutland (a).....	G. Mather.....	165	11:10	1939	Blockade (10).....	J. Colwill.....	165	9:16
Talisman (a).....	J. Spencer, Jr.....	165	9:33 3/4	1940	Blockade (11).....	J. Colwill.....	165	9:10 3/4
Bourgeois (a).....	G. Brown, Jr.....	165	10:18 3/4	1941	Coq Bruyere (12).....	R. Hamilton.....	165	8:45
Brosseau (a).....	G. Mather.....	165	9:38	1942	Winton (8).....	S. Janney, Jr.....	165	8:44 3/4
Marcellinus (a).....	E. M. Cheston.....	165	9:45 3/4	1946	Winton (12).....	S. Janney, Jr.....	165	8:57

MASSACHUSETTS HANDICAP

Suffolk Downs; 3-year-olds and over; 1 1/8 miles.

Year	Winner, age	Jockey	Wt. Win val.	Year	Winner, age	Jockey	Wt. Win val.
1935	Top Row (4)	G. Woolf	116 \$18,750	1941	War Relic (3)	T. Atkinson	102 48.3
1936	Time Supply (5)	R. Workman	121 23,500	1942	Whirlaway (4)	G. Woolf	130 43.8
1937	Seabiscuit (4)	J. Pollard	130 51,780	1943	Market Wise (5)	V. Nodarse	126 39.6
1938	Menow (3)	N. Wall	107 40,550	1944	First Fiddle (5)	J. Longden	124 41.8
1939	Fighting Fox (4)	J. Stout	113 49,250	1945	First Fiddle (6)	J. Longden	121 42.8
1940	Eight Thirty (4)	H. Richards	126 46,550	1946	Pavot (4)	A. Kirkland	120 47.7

MAYFLOWER STAKES

Suffolk Downs; 2-year-olds; 3/4 mile.

Distance 3/4 mile in 1935 to 1945; 5/8 mile in 1936 and 1937.

Year	Winner	Jockey	Wt. Win val.	Year	Winner	Jockey	Wt. Win val.
1935	Maeriel	E. Litzenger	123 \$2,330	1941	Alsab	R. L. Vedder	119 15.9
1936	Airflame	S. Renick	123 2,595	1942	Through Bound	D. Brunelle	116 14.5
1937	Historic Era	J. Deering	112 2,085	1943	Cocopet	C. McCreary	113 13.8
1938	Heather Time	F. Maschek	115 8,900	1944	Pavot	G. Woolf	119 28.0
1939	Roman Flag	L. Dupps	110 11,850	1945	Air Rate	H. Pratt	122 23.6
1940	Blue Pair	M. Berger	119 12,600	1946	Mel Eppley	J. Licausi	116 27.9

MELBOURNE CUP

Melbourne, Australia; 3-year-olds and over; 2 miles.

Year	Winner	Age	Jockey	Wt. Win val.	Year	Winner	Age	Jockey	Wt. Win val.
1861	Archer	5	J. Cutts	133	1904	Acasia	7	T. Clayton	104 33.1
1862	Archer	6	J. Cutts	142	1905	Blue Spec	6	F. Bullock	112 31.8
1863	Banker	3	H. Chifney	74	1906	Poseidon	3	T. Clayton	104 31.6
1864	Lantern	3	S. Davis	87	1907	Apologue	5	W. Evans	107 24.5
1865	Toryboy	7	E. Kavanagh	98	1908	Lord Nolan	3	J. R. Flynn	94 25.6
1866	The Bard	3	W. Davis	85	1909	Prince Foote	3	W. H. McL'hian	106 27.1
1867	Tim Whiffler	5	J. Driscoll	123	1910	Comedy King	4	W. H. McL'hian	109 30.8
1868	Glencoe	4	C. Stanley	127	1911	The Parisian	6	R. Cameron	121 33.2
1869	Warrior	6	C. Morrison	122	1912	Piastre	4	A. Shanahan	107 32.8
1870	Nimblefoot	7	J. Day	92	1913	Posinatus	5	A. Shanahan	98 36.3
1871	The Pearl	5	J. T. Kavanagh	101	1914	Kingsburgh	4	G. Meddick	96 38.2
1872	The Quack	6	W. Enderson	108	1915	Patrobas	3	R. Lewis	104 38.7
1873	Don Juan	4	W. Wilson	96	1916	Sasanof	3	F. Foley	95 34.7
1874	Haricot	4	P. Pigott	91	1917	West Court	5	W. H. McL'hian	117 29.8
1875	Wollomal	6	R. Batty	106	1918	Night Watch	5	W. Duncan	93 30.6
1876	Briseis	3	P. St. Albans	88	1919	Artilleryman	3	R. Lewis	104 36.4
1877	Chester	3	P. Pigott	96	1920	Poitrel	6	K. Bracken	140 36.5
1878	Calamia	5	T. Brown	114	1921	Sister Olive	3	E. O'Sullivan	93 40.8
1879	Darriwell	5	S. Cracknell	102	1922	King Ingoda	4	A. Wilson	99 52.7
1880	Grand Fleneur	3	T. Hales	98	1923	Bitalli	5	A. Wilson	98 52.4
1881	Zulu	4	J. Gough	80	1924	Backwood	6	P. Brown	114 50.9
1882	The Assyrian	5	C. Hutchins	111	1925	Windbag	4	J. Munro	130 52.4
1883	Martini Henri	3	J. Williamson	103	1926	Spearfelt	5	H. Cairns	129 49.5
1884	Malua	5	A. Robertson	135	1927	Trivalve	3	R. Lewis	104 49.9
1885	Sheet Anchor	7	M. O'Brien	109	1928	Statesman	4	J. Munro	112 46.8
1886	Arsenal	4	W. English	103	1929	Nightmarch	4	R. Reed	128 47.1
1887	Dunlop	5	T. Sanders	115	1930	Phar Lap	4	J. Pike	138 46.1
1888	Mentor	4	M. O'Brien	115	1931	White Nose	5	N. Percival	98 35.0
1889	Bravo	6	J. Anwin	119	1932	Peter Pan	3	W. Duncan	104 24.5
1890	Carbine	5	R. Ramage	145 \$51,150	1933	Hall Mark	3	J. O'Sullivan	106 26.0
1891	Malvolio	4	G. Redfern	116 50,620	1934	Peter Pan	5	D. Munro	136 41.0
1892	Glenloth	5	G. Robson	111 49,835	1935	Marabou	4	K. Voitre	109 40.0
1893	Taroola	8	H. Cripps	116 35,750	1936	Wotan	4	O. Phillips	110 36.0
1894	Patron	4	H. Dawes	129	1937	The Trump	5	A. Reed	117 36.0
1895	Auraria	5	J. Stevenson	102	1938	Catalogue	8	F. Shean	116 28.0
1896	Newhaven	3	H. Gardiner	111 20,740	1939	Rivette	6	E. Preston	97 29.5
1897	Gaulus	5	S. Callinan	106 20,840	1940	Old Rowley	7	A. Knox	110 22.3
1898	The Gaffer	5	J. Gough	128 21,460	1941	Skipton	3	W. Cook	104 17.9
1899	Merrivew	3	V. Turner	104 21,965	1942	Colonus	4	H. McCloud	100 16.9
1900	Clean Sweep	3	A. Richardson	98 21,985	1943	Dark Felt	6	V. Hartney	116 24.8
1901	Revenue	5	F. Dunn	108 30,585	1944	Sirius	4	D. Munro	117 17.8
1902	The Victory	4	R. Lewis	124 23,420	1945	Rainbird	4	W. Cook	105 40.0
1903	Lord Cardigan	3	N. Godby	92 31,620	1946	Russia	6	D. Munro	126 20.0

NARRAGANSETT SPECIAL

Narragansett Park; 3-year-olds and over; 1 3/16 miles.

Year	Winner, age	Jockey	Wt.	Win val.	Year	Winner, age	Jockey	Wt.	Win val.
1934	Time Supply (3)	T. Luther	120	\$28,000	1941	War Relic (3)	T. Atkinson	107	22,400
1935	Top Row (4)	W. D. Wright	110	25,700	1942	Whirlaway (4)	G. Woolf	130	24,300
1936	Rosemont (4)	H. Richards	121	32,100	1943	Market Wise (5)	J. Longden	124	25,300
1937	Calumet Dick (5)	H. Dabson	115	28,200	1944	Paperboy (6)	W. Mehrstens	110	23,150
1938	Stagehand (3)	J. Westrope	119	26,300	1945	Westminster (4)	W. Garner	110	20,400
1939	Challedon (3)	H. Richards	118	24,600	1946	Lucky Draw (5)	C. McCreary	123	27,950
1940	Hash (4)	E. Arcaro	122	24,600					

PIMLICO FUTURITY

Pimlico; 2-year-olds; 1 1/16 miles.

Run in two divisions in 1922. Distance 1 mile prior to 1929.

Year	Winner	Jockey	Wt.	Win val.	Year	Winner	Jockey	Wt.	Win val.
1921	Morvich	A. Johnson	122	\$42,750	1935	Hollywood	S. Coucci	122	45,850
1922	Blossom Time	A. Johnson	119	41,015	1936	Matey	H. Richards	119	25,300
1922	Sally's Alley	A. Johnson	116	41,015	1937	Nedayr	W. D. Wright	122	28,140
1923	Beau Butler	G. W. Carroll	122	54,030	1938	Challedon	G. Seabo	119	28,770
1924	Stimulus	H. Thurber	122	49,220	1939	Bimelech	F. A. Smith	122	33,230
1925	Canter	C. Turner	117	53,350	1940	Bold Irishman	J. Gilbert	122	33,830
1926	Fair Star	O. Bourassa	119	59,660	1941	Contradiction	K. McCombs	122	33,910
1927	Glade	L. Morris	114	53,310	1942	Count Fleet	J. Longden	119	30,820
1928	High Strung	L. McAtee	122	50,750	1943	Platter	C. McCreary	119	33,440
1929	Flying Heels	W. Kelsay	117	55,810	1944	Pot o' Luck	D. Dodson	122	35,130
1930	Equipoise	R. Workman	119	50,360	1945	Star Pilot	A. Kirkland	122	36,365
1931	Top Flight	R. Workman	119	56,170	1946	Jet Pilot	J. Gilbert	122	37,615
1932	Swivel	J. Gilbert	116	62,430					

PIMLICO SPECIAL

Pimlico; 3-year-olds and over; 1 3/16 miles.

For 3-year-olds in 1937.

Year	Winner, age	Jockey	Wt.	Win val.	Year	Winner, age	Jockey	Wt.	Win val.
1937	War Admiral	C. Kutsinger	128	\$ 5,680	1942	Whirlaway (4)	G. Woolf	126	10,000
1938	Seabiscuit (5)	G. Woolf	120	15,000	1943	Shut Out (4)	E. Arcaro	126	25,000
1939	Challedon (3)	E. Arcaro	120	10,000	1944	Twilight Tear (3)	D. Dodson	117	25,000
1940	Challedon (4)	G. Woolf	126	10,000	1945	Armed (4)	D. Dodson	126	25,000
1941	Market Wise (3)	W. Eads	120	10,000	1946	Assault (3)	E. Arcaro	120	25,000

*Walkover.

PREAKNESS STAKES

Pimlico; 3-year-olds; 1 3/16 miles

Distance 1½ miles prior to 1889; 1¼ miles in 1889; 1 mile in 1909 and 1910. Run in two divisions in 1918. Distance 1½ miles from 1911 to 1924, inclusive.

Year	Winner	Jockey	Wt.	Win val.	Year	Winner	Jockey	Wt.	Win val.
1873	Survivor	G. Barbee	110		1919	Sir Barton	J. Loftus	126	24,500
1874	Culpepper	M. Donohue	110		1920	Man o' War	C. Kummer	126	23,000
1875	Tom Ochiltree	L. Hughes	110		1921	Broomspun	F. Coltletti	114	43,000
1876	Shirley	G. Barbee	110		1922	Pillory	L. Morris	114	51,000
1877	Cloverbrook	C. Holloway	110		1923	Vigil	B. Marinelli	114	52,000
1878	Duke of Magenta	C. Holloway	110		1924	Nellie Morse	J. Merimee	121	54,000
1879	Harold	W. Hughes	110	\$2,550	1925	Coventry	C. Kummer	126	52,700
1880	Grenada	W. Hughes	110	2,000	1926	Display	J. Maiben	126	53,625
1881	Saunterer	W. Costello	110	1,950	1927	Bostonian	A. Abel	126	53,100
1882	Vanguard	W. Costello	110	1,250	1928	Victorian	R. Workman	126	60,000
1883	Jacobus	G. Barbee	110	1,635	1929	D. Freeland	L. Schaefer	126	52,325
1884	Knight of Ellerslie	S. H. Fisher	118	1,905	1930	Gallant Fox	E. Sande	126	51,925
1885	Tecumseh	J. McLaughlin	110	2,160	1931	Mate	G. Ellis	126	48,225
1886	The Bard	S. H. Fisher	118	2,050	1932	Burgoo King	E. James	126	50,375
1887	Dunbine	W. Donohue	118	1,675	1933	Head Play	C. Kutsinger	126	26,850
1888	Refund	F. Littlefield	118	1,185	1934	High Quest	R. Jones	126	25,175
1889	Buddhist	H. Anderson	118	1,130	1935	Omaha	W. Saunders	126	25,325
1909	Effendi	W. Doyle	116	3,225	1936	Bold Venture	G. Woolf	126	27,325
1910	Layminster	R. Estep	84	3,300	1937	War Admiral	C. Kutsinger	126	45,600
1911	Watervale	E. Dugan	112	2,700	1938	Dauber	M. Peters	126	51,875
1912	Colonel Holloway	C. Turner	107	1,450	1939	Challedon	G. Seabo	126	53,710
1913	Buskin	J. Butwell	117	1,670	1940	Bimelech	F. A. Smith	126	53,230
1914	Holiday	A. Schuttinger	108	1,355	1941	Whirlaway	E. Arcaro	126	49,365
1915	Rhine Maiden	D. Hoffman	104	1,275	1942	Alsab	B. James	126	58,175
1916	Damrosch	L. McAtee	115	1,380	1943	Count Fleet	J. Longden	126	43,190
1917	Kalitan	E. Haynes	116	4,800	1944	Pensive	C. McCreary	126	60,075
1918	War Cloud	J. Loftus	117	12,250	1945	Polynesian	W. D. Wright	126	66,170
1918	Jack Hare Jr.	C. Peak	115	11,250	1946	Assault	W. Mehrstens	126	99,120

SANTA ANITA DERBY**Santa Anita Park; 3-year-olds; 1½ miles**

Distance 1½ miles prior to 1938.

Year	Winner	Jockey	Wt.	Win val.	Year	Winner	Jockey	Wt.	Win val.
1935	Gille.....	S. Coucci.....	126	\$19,650	1940	Swespidia.....	R. Neves.....	120	43,850
1936	He Did.....	W. D. Wright.....	126	26,000	1941	Porter's Cap.....	L. Haas.....	120	44,975
1937	Fairy Hill.....	M. Peters.....	121	45,425	1945	Bymeabond.....	G. Woolf.....	119	37,250
1938	Stagehand.....	J. Westrope.....	118	42,350	1946	Knockdown.....	R. Permane.....	122	74,680
1939	Ciencia.....	C. Bierman.....	115	41,850					

SANTA ANITA HANDICAP**Santa Anita Park; 3-year-olds and over; 1¼ miles**

Year	Winner, age	Jockey	Wt.	Win val.	Year	Winner, age	Jockey	Wt.	Win val.
1935	Azucar (7).....	G. Woolf.....	117	\$108,400	1940	Seabiscuit (7).....	J. Pollard.....	130	86,650
1936	Top Row (5).....	W. D. Wright.....	116	104,600	1941	Bay View (4).....	N. Wall.....	108	89,360
1937	Rosemont (5).....	H. Richards.....	124	90,700	1945	Thumbs Up (6).....	J. Longden.....	130	82,925
1938	Stagehand (3).....	N. Lane.....	100	91,450	1946	War Knight (6).....	J. Adams.....	115	101,220
1939	Kayak II (4).....	J. Adams.....	110	91,100					

SARATOGA HANDICAP**Saratoga; 3-year-olds and over; 1¼ miles.**

Distance 1¼ miles in 1901; 1½ miles in 1902; run at Belmont Park from 1943 to 1945, inclusive.

Year	Winner, age	Jockey	Wt.	Win val.	Year	Winner, age	Jockey	Wt.	Win val.
1901	Rockton (4).....	N. Turner.....	116	\$ 6,800	1925	Valador (5).....	J. Callahan.....	106	5,990
1902	Francesco (3).....	H. Michaels.....	97	6,800	1926	Princess Doreen (5).....	J. McTague.....	116	8,650
1903	Waterboy (4).....	Odum.....	127	8,800	1927	Mars (4).....	E. Sande.....	122	8,000
1904	Lord of the Vale (4).....	Lyne.....	112	8,800	1928	Chance Shot (4).....	E. Sande.....	122	8,250
1905	Caughnawaga (6).....	T. Burns.....	119	8,300	1929	Diavolo (4).....	J. Maiben.....	123	8,150
1906	Dandelion (4).....	Sewell.....	113	8,300	1930	Marine (4).....	F. J. Baker.....	107	7,400
1907	McCarter (3).....	W. Miller.....	111	8,300	1931	St. Brideaux (3).....	C. Kurtzinger.....	109	7,700
1908	Montfort (4).....	McCahey.....	100	1,150	1932	Faireno (3).....	T. Malley.....	114	6,350
1909	Affliction (3).....	E. Martin.....	90	3,850	1933	Caesars Ghost (3).....	D. Belizzi.....	102	3,775
1910	Olambala (4).....	Butwell.....	128	5,800	1934	Watch Him (5).....	E. Steffen.....	114	3,500
1913	Cock o' the Walk (3).....	J. Glass.....	107	3,850	1935	Vicar (4).....	W. Saunders.....	107½	8,200
1914	Borrow (6).....	J. Notter.....	123	3,875	1936	Discovery (5).....	J. Bejshak.....	132	8,350
1915	Roamer (4).....	J. Butwell.....	128	2,300	1937	Esposa (5).....	N. Wall.....	113	8,150
1916	Stromboli (5).....	J. McTaggart.....	121	3,850	1938	War Admiral (4).....	C. Kurtzinger.....	130	7,500
1917	Roamer (6).....	J. Butwell.....	122	4,850	1939	Eight Thirty (3).....	D. Meade.....	106	8,200
1918	Roamer (7).....	F. Robinson.....	129	5,350	1940	Sickle T. (5).....	R. Nash.....	110	7,550
1919	Purchase (3).....	W. Knapp.....	118	5,350	1941	Halait (4).....	C. McCreary.....	113	7,950
1920	Sir Barton (4).....	E. Sande.....	129	5,200	1942	Can't Wait (7).....	W. Eads.....	110	10,700
1921	Yellow Hand (4).....	C. H. Miller.....	120	7,750	1943	Princequillo (3).....	C. McCreary.....	108	15,200
1922	Grey Lag (4).....	L. Fator.....	130	7,750	1944	Paperboy (6).....	W. Mehrtens.....	103	35,780
1923	Prince James (5).....	L. Fator.....	112	7,450	1945	Olympic Zenith (4).....	C. McCreary.....	108	37,105
1924	My Own (4).....	E. Barnes.....	124	8,150	1946	Lucky Draw (5).....	C. McCreary.....	117	22,900

SARATOGA SPECIAL**Saratoga; 2-year-olds; 3/4 mile.**

Distance 5½ furlongs prior to 1906. Run at Belmont Park from 1943 to 1945, inclusive.

Year	Winner	Jockey	Wt.	Win val.	Year	Winner	Jockey	Wt.	Win val.
1901	Goldsmith.....	N. Turner.....	122	\$14,500	1926	Chance Shot.....	E. Sande.....	122	15,740
1902	Irish Lad.....	N. Turner.....	122	18,000	1927	Ariel.....	L. Fator.....	122	18,000
1903	Aristocracy.....	F. O'Neill.....	122	21,500	1928	Blue Larkspur.....	A. Pascoma.....	122	16,750
1904	Sysonby.....	Redfern.....	122	14,000	1929	Whichone.....	L. McAtee.....	122	16,500
1905	Mohawk II.....	Redfern.....	122	16,500	1930	Jamestown.....	L. McAtee.....	122	14,050
1906	Salvidere.....	Sewell.....	119	15,000	1931	Top Flight.....	R. Workman.....	119	11,000
1907	Colin.....	W. Miller.....	122	13,000	1932	Happy Gal.....	T. Malley.....	119	9,250
1908	Sir Martin.....	C. H. Shilling.....	122	9,250	1933	Wise Daughter.....	J. Gilbert.....	119	8,500
1909	Waldo.....	Nicol.....	122	4,875	1934	Boxthorn.....	D. Meade.....	122	6,750
1910	Novelty.....	C. H. Shilling.....	122	12,250	1935*	Red Rain.....	R. Workman.....	122	.....
1913	Roamer.....	Byrne.....	119	6,500	.....	Coldstream.....	E. Arcaro.....	122	3,500
1914	Regret.....	J. Notter.....	119	5,125	1936	Forty Winks.....	R. Workman.....	122	7,000
1915	Dominant.....	T. McTaggart.....	122	5,125	1937	Pumpkin.....	J. Gilbert.....	122	8,000
1916	Campfire.....	J. McTaggart.....	122	5,625	1938	El Chico.....	N. Wall.....	122	8,000
1917	Sun Briar.....	W. Knapp.....	122	11,750	1939	Bimelech.....	F. A. Smith.....	122	9,000
1918	Hannibal.....	L. Ensor.....	122	11,000	1940	Whirlaway.....	J. Longden.....	122	9,750
1919	Golden Broom.....	E. Ambrose.....	122	8,500	1941	Amphitheatre.....	A. Robertson.....	122	11,250
1920	Tryster.....	J. Rodriguez.....	122	9,500	1942	Halberd.....	G. Woolf.....	122	8,000
1921	Morvich.....	F. Keogh.....	122	10,500	1943	Cocopet.....	C. McCreary.....	119	5,500
1922	Goshawk.....	L. McAtee.....	122	12,750	1944	Pavot.....	G. Woolf.....	122	4,945
1923	St. James.....	E. Sande.....	122	12,750	1945	Mist o' Gold.....	W. D. Wright.....	122	6,435
1924	Sunny Man.....	L. Fator.....	122	13,000	1946	Grand Admiral.....	J. D. Jessop.....	122	6,500
1925	Haste.....	E. Sande.....	122	12,000					

*Dead heat.

SELIMA STAKES

Laurel Park; 2-year-old fillies; 1 1/16 miles.

ance 1 mile prior to 1941. Run at Pimlico in 1943.

Winner	Jockey	Wt.	Win val.
air Star.....	O. Bourassa.....	114	\$23,370
ateau.....	E. Ambrose.....	115	23,985
urrent.....	E. Pool.....	111	22,370
hara.....	L. Fator.....	109	24,730
ambour.....	L. Schaefer.....	112	26,070
laughing Queen.....	J. Bejshak.....	114	23,370
otebook.....	H. Mills.....	114	23,790
abot.....	R. Workman.....	113	22,175
ellie Flag.....	E. Arcaro.....	122	22,420
plit Second.....	E. Arcaro.....	111	20,580
alma Dee.....	A. Robertson.....	111	22,480

Year	Winner	Jockey	Wt.	Win val.
1937	Jacula.....	W. D. Wright.....	114	24,430
1938	Big Hurry.....	F. A. Smith.....	114	25,890
1939	War Beauty.....	A. Robertson.....	114	26,560
1940	Valdina Myth.....	H. Richards.....	119	23,580
1941	Ficklebush.....	K. McCombs.....	107	24,600
1942	Askmenow.....	C. Bierman.....	111	21,900
1943	Miss Keeneland.....	F. A. Smith.....	111	20,750
1944	Busher.....	E. Arcaro.....	117	25,780
1945	Athene.....	W. Mehrtens.....	111	33,790
1946	Bee Ann Mac.....	A. DeLara.....	114	41,840

STARS AND STRIPES HANDICAP

Arlington Park; 3-year-olds and over; 1 1/8 miles.

ance 1 1/8 miles in 1942. Run at Washington Park from 1943 to 1945, inclusive.

Winner, age	Jockey	Wt.	Win val.
Dowagiac (4).....	A. Pascuma.....	108	\$15,550
Blue Larkspur (4).....	J. Smith.....	121	26,050
lucky Play (4).....	D. Trivett.....	105	24,650
Equipoise (4).....	R. Workman.....	129	22,300
ndian Runner (4).....	A. Tipton.....	114	10,440
ndian Runner (5).....	A. Tipton.....	118	10,760
Discovery (4).....	J. Bejshak.....	126	9,000
Stand Pat (5).....	C. McTague.....	116	9,520
Corinto (5).....	J. Westrope.....	109	9,000

Year	Winner, age	Jockey	Wt.	Win val.
1938	War Minstrel (4).....	I. Hanford.....	107	9,060
1939	Count d'Or (4).....	J. Longden.....	107	8,620
1940	Advocator (5).....	J. E. Oros.....	118	9,260
1941	Steel Heels (5).....	A. Snider.....	110	9,900
1942	Take Wing (4).....	F. A. Smith.....	103	8,600
1943	Rounders (4).....	F. Zufelt.....	116	42,050
1944	Georgie Drum (5).....	G. Woolf.....	113	41,000
1945	Devalue (7).....	S. Brooks.....	108	40,000
1946	Witch Sir (4).....	R. Campbell.....	115	40,100

SUBURBAN HANDICAP

Belmont Park; 3-year-olds and over; 1 1/4 miles.

a at Sheepshead Bay prior to 1913.

Winner, age	Jockey	Wt.	Win val.
Gen. Monroe (6).....	W. Donohue.....	124	\$4,945
Pontiac (4).....	H. Olney.....	102	5,855
Troubadour (4).....	W. Fitzpatrick.....	115	5,697
Eurus (4).....	G. Davis.....	102	6,065
Elkwood (5).....	W. Martin.....	119	6,812
Raceland (4).....	E. Garrison.....	120	6,900
Salvator (4).....	J. Murphy.....	127	6,900
Loantaka (5).....	M. Bergen.....	110	9,900
Montana (4).....	E. Garrison.....	115	17,750
owlander (5).....	P. McDermott.....	105	17,750
Ramapo (4).....	F. Taral.....	120	12,070
Lazarone (4).....	A. Hamilton.....	115	4,730
Henry of Navarre (5).....	H. Griffin.....	129	5,850
Ben Brush (4).....	W. Simms.....	123	5,850
Tillo (4).....	A. Clayton.....	119	6,800
Imp (5).....	N. Turner.....	114	6,800
Kinley Mack (4).....	P. McCue.....	125	6,800
Alcedo (4).....	H. Spencer.....	112	7,800
Gold Heels (4).....	O. Wonderly.....	124	7,800
'Africander (3).....	G. Fuller.....	110	16,490
Hermis (5).....	A. Redfern.....	127	16,800
Beldame (4).....	F. O'Neill.....	123	16,800
Go Between (5).....	W. Shaw.....	116	16,800
Nealon (4).....	W. Dugan.....	113	16,800
Ballot (4).....	J. Notter.....	127	19,750
Fitz Herbert (3).....	E. Dugan.....	105	3,850
Olambala (4).....	G. Archibald.....	115	4,800
Whisk Broom II (6).....	J. Notter.....	139	3,000
Stromboli (4).....	C. Turner.....	122	3,925
Friar Rock (3).....	M. Garner.....	101	3,450

Year	Winner, age	Jockey	Wt.	Win val.
1917	Boots (6).....	J. Loftus.....	122	4,900
1918	Johren (3).....	F. Robinson.....	110	5,850
1919	Corn Tassel (5).....	L. Ensor.....	108	5,200
1920	Paul Jones (3).....	A. Schuttinger.....	106	6,350
1921	Audacious (5).....	C. Kummer.....	120	8,100
1922	Captain Alcock (5).....	C. Ponce.....	108	8,200
1923	Grey Lag (5).....	E. Sande.....	135	7,800
1924	Mad Hatter (8).....	E. Sande.....	125	9,150
1925	Sting (4).....	B. Bruening.....	122	11,300
1926	Crusader (3).....	J. Callahan.....	104	13,150
1927	Crusader (4).....	C. Kummer.....	127	11,875
1928	Dolan (4).....	J. Callahan.....	105	13,675
1929	Bateau (4).....	E. Ambrose.....	112	14,100
1930	Petee Wrack (5).....	E. Sande.....	122	11,850
1931	Mokatam (4).....	A. Robertson.....	123	11,200
1932	White Clover II (6).....	R. Workman.....	115	11,100
1933	Equipoise (5).....	R. Workman.....	132	7,250
1934	Ladysman (4).....	S. Coucci.....	114	5,750
1935	Head Play (5).....	C. Kurtzinger.....	114	12,175
1936	Firethorn (4).....	H. Richards.....	116	12,125
1937	Aneroid (4).....	C. Rosengarten.....	110	10,950
1938	Snark (5).....	J. Longden.....	120	17,050
1939	Cravat (4).....	J. Westrope.....	121	17,750
1940	Eight Thirty (4).....	H. Richards.....	127	19,850
1941	Your Chance (4).....	D. Meade.....	114	25,200
1942	Market Wise (4).....	B. James.....	124	27,800
1943	Don Bingo (4).....	J. Renick.....	104	27,600
1944	Aletern (5).....	H. Lindberg.....	108	39,210
1945	Devil Diver (6).....	E. Arcaro.....	132	34,995
1946	Armed (5).....	D. Dodson.....	130	43,000

TEMPLE GWATHMEY MEMORIAL STEEPLECHASE HANDICAP

United Hunts, Belmont Park; 4-year-olds and over; about 3 miles.

Distance about 2½ miles prior to 1944.

Year	Winner, age	Jockey	Wt.	Win val.	Year	Winner, age	Jockey	Wt.	Win val.
1924	Surf (8)	J. Pierce	139	\$ 2,430	1936	Sailor Beware (4)	W. Collins	142	1 585
1925	MacCarthy More (4)	D. Byers	144	5,375	1937	Jungle King (7)	H. Little	147	1 688
1926	Fairmount (5)	D. Byers	158	11,950	1938	Torturer (4)	J. McGovern	144	1 810
1927	Fairmount (6)	D. Byers	170	12,375	1939	Saluda (6)	F. Maier	148	2 270
1928	Fairmount (7)	D. Byers	170	13,400	1940	Cottesmore (5)	F. Slate	163	2 010
1929	Arc Light (5)	D. Byers	154	15,900	1941	Parma (6)	F. Slate	141	2 210
1930	Arc Light (6)	F. Slate	157	13,675	1942	Iron Shot (5)	N. Brown	144	2 365
1931	Chenango (4)	Mr. G. H. B'ick	155	14,525	1943	Knight's Quest (5)	W. Passmore	142	4 570
1932	Golden Meadow (6)	A. Pikor	153	8,975	1944	Burma Road (5)	J. Magee	139	12 135
1933	Blot (6)	P. McGinnis	154	1,450	1945	Caddie (7)	E. Roberts	139	12 450
1934	Kummel (4)	E. Christian	136	1,800	1946	War Battle (5)	W. Passmore	138	14 500
1935	St. Francis (7)	Mr. C. R. White	143	2,310					

TIJUANA HANDICAP

Hipodromo de Tijuana; 3-year-olds and over; 1¼ miles.

Run as Coffroth Handicap prior to 1930. Distance 1¼ miles in 1938. Run as Caliente Handicap from 1930 to 1944, inclusive.

Year	Winner, age	Jockey	Wt.	Win val.	Year	Winner, age	Jockey	Wt.	Win val.
1917	Sasin (4)	W. Kelsay	115	\$ 4,000	1930	Victorian (5)	G. Ellis	126	98 465
1921	Be Frank (5)	W. McIntyre	131	14,775	1931	Mike Hall (7)	S. O'Donnell	116	100 070
1922	Mulciber (4)	J. Huntamer	113	15,000	1932	Phar Lap (6)	W. Elliott	129	50 080
1923	Rebuke (4)	W. Pool	104	29,475	1933	Gallant Sir (4)	G. Woolf	124	24 290
1924	Runstar (5)	E. Barnes	123	43,650	1934	Gallant Sir (5)	J. Pollard	130	23 380
1925	Atherstone (5)	H. Walkoff	104	56,425	1938	Seabiscuit (5)	N. Richardson	130	8 690
1926	Carlaris (3)	W. Munden	100	70,700	1944	Vain Grove (6)	H. McGahan	115	8 150
1927	Sir Harry (3)	O. Bourassa	103	84,400	1945	Bric a Brac (4)	J. Westrope	116	16 000
1928	Crystal Pennant (4)	T. Luther	100	92,700	1946	Cari-Jones (7)	A. Skorsinski	115	8 350
1929	Golden Prince (5)	J. Parmalee	112	98,250					

TRAVERS STAKES

Saratoga; 3-year-olds; 1¼ miles.

Distance 1¼ miles prior to 1890; 1½ miles in 1890, 1891, and 1892; 1¼ miles in 1893, 1894 and 1907; 1½ miles in 1895, 1901, 1902, and 1903. Run as Travers Midsummer Derby from 1927 to 1932, inclusive. Run at Belmont Park in 1943, 1944, and 1945.

Year	Winner	Jockey	Wt.	Win val.	Year	Winner	Jockey	Wt.	Win val.
1864	Kentucky	Gilpatrick	100	\$2,950	1895	Liza	Griffin	104	1 125
1865	Maiden	Sewell	97	3,400	1897	Rensselaer	Taral	126	1 425
1866	Merrill	Abe	100	3,500	1901	Blues	Shaw	126	6 750
1867	Ruthless	Gilpatrick	103	2,850	1902	Hermis	Rice	111	6 750
1868	The Banshee	Smith	97	3,150	1903	Ada Nay	F. O'Neill	106	8 150
1869	Glenelg	C. Miller	110	3,000	1904	Broomstick	T. Burns	129	5 850
1870	Kingfisher	C. Miller	110	4,950	1905	Dandelion	Shaw	111	8 350
1871	Harry Bassett	W. Miller	110	5,600	1906	Gallivant	W. Miller	111	5 800
1872	Joe Daniels	J. Rowe	110	5,500	1907	Frank Gill	Notter	129	5 800
1873	Tom Bowling	R. Swim	110	5,400	1908	Dorante	J. Lee	116	5 800
1874	Attila	Barbee	110	5,050	1909	Hilarious	Scoville	129	5 800
1875	D'Artagnan	Barbee	110	4,850	1910	Dalmatian	C. H. Shilling	129	4 825
1876	Sultana	Hayward	107	3,700	1913	Rock View	T. McTaggart	129	2 725
1877	Baden Baden	Sayers	110	4,550	1914	Roamer	J. Butwell	123	3 090
1878	Duke of Magenta	Hughes	118	4,250	1915	Lady Rotha	M. Garner	106	2 150
1879	Falsetto	I. Murphy	118	4,950	1916	Spur	J. Loftus	129	3 125
1880	Grenada	Hughes	118	3,750	1917	Omar Khayyam	J. Butwell	129	5 500
1881	Hindoo	J. McLaughlin	118	2,950	1918	Sun Briar	W. Knapp	120	7 700
1882	Carley B.	Quantrell	115	3,450	1919	Hannibal	L. Ensor	120	9 835
1883	Barnes	J. McLaughlin	118	3,400	1920	Man o' War	A. Schuttinger	129	9 275
1884	Rataplan	Fitzpatrick	118	4,150	1921	Sporting Blood	L. Lyke	116	10 275
1885	Bersan	Spellman	118	4,025	1922	Little Chief	L. Fator	123	11 375
1886	Inspector B.	J. McLaughlin	118	3,825	1923	Wilderness	B. Marinelli	120	13 550
1887	Carey	Blaylock	118	3,825	1924	Sun Flag	F. Keogh	115	14 675
1888	Sir Dixon	J. McLaughlin	118	4,625	1925	Dangerous	C. Kummer	115	13 425
1889	Long Dance	Barnes	118	3,700	1926	Mars	F. Colletti	123	15 050
1890	Sir John	Bergen	118	4,925	1927	Brown Bud	L. Fator	120	29 925
1891	Vallera	R. Williams	122	2,900	1928	Petee Wrack	S. O'Donnell	117	30 550
1892	Azra	Clayton	122	2,750	1929	Beacon Hill	A. Robertson	117	31 825
1893	Stowaway	McDermott	107	2,450	1930	Jim Dandy	F. J. Baker	120	27 050
1894	Henry of Navarre	Taral	125	2,350	1931	Twenty Grand	L. McAtee	126	33 000

Travers Stakes—(cont.)

Winner	Jockey	Wt. Win val.	Year	Winner	Jockey	Wt. Win val.
er Hero.....	J. Gilbert.....	115 23,150	1940	Fenelon.....	J. Stout.....	122 17,425
lander.....	R. Jones.....	126 21,050	1941	Whirlaway.....	A. Robertson.....	130 16,900
servant.....	L. Humphries.....	112 14,650	1942	Shut Out.....	E. Arcaro.....	130 17,825
ld Foam.....	S. Coucci.....	112 14,675	1943	Eurasian.....	S. Brooks.....	112 19,850
anville.....	J. Stout.....	127 14,700	1944	By Jimmy.....	E. Arcaro.....	126 25,015
urning Star.....	W. D. Wright.....	117 14,550	1945	Adonis.....	C. McCreary.....	110 28,680
anksgiving.....	E. Arcaro.....	117 14,400	1946	Natchez.....	T. Atkinson.....	124 24,750
ght Thirty.....	H. Richards.....	117 16,575				

WASHINGTON HANDICAP

Laurel Park; 3-year-olds and over; 1¼ miles.

Since 1½ miles prior to 1922. Run at Pimlico and at 1½ miles in 1943.

Winner, age	Jockey	Wt. Win val.	Year	Winner, age	Jockey	Wt. Win val.
J. Johnson (6).....	P. Goldstein.....	116 \$2,460	1931	Clock Tower (3).....	P. Walls.....	112 25,950
ae Manager (3).....	G. Byrne.....	124 2,290	1932	Tred Avon (4).....	R. Jones.....	112 14,800
hore (5).....	C. Burlingame.....	112 2,860	1933	Dark Secret (4).....	H. Mills.....	123 8,575
amer (3).....	J. Butwell.....	124 1,970	1934	Azucar (6).....	R. Workman.....	114 8,025
iner (4).....	J. McTaggart.....	104 1,930	1935	Firethorn (3).....	H. Richards.....	119 10,075
oots (5).....	C. Fairbrother.....	122 2,010	1936	Roman Soldier (4).....	J. Westrope.....	117 10,050
ng Neptune (4).....	R. Troise.....	95 1,950	1937	War Admiral (3).....	C. Kurlinger.....	126 15,350
idway (4).....	W. J. O'Brien.....	111½ 1,950	1938	Jacula (3).....	M. Peters.....	117 15,650
ceanic (3).....	B. Marinelli.....	104 23,470	1939	Masked General (5).....	N. Wall.....	109 14,850
alto (3).....	L. McAtee.....	109 24,250	1940	Can't Wait (5).....	A. Robertson.....	120 15,350
g Braze (3).....	I. Parke.....	106 26,200	1941	Pictor (4).....	G. Woolf.....	119 15,300
y Smoke (4).....	J. Butwell.....	112 25,200	1942	Whirlaway (4).....	G. Woolf.....	130 14,350
ars (3).....	F. Coltilet.....	118 24,150	1943	Anticlimax (4).....	N. Jemas.....	105 17,600
splay (4).....	J. Maiben.....	112 26,200	1944	Megogo (3).....	K. Scawthorn.....	110 18,900
nike Hall (4).....	L. McDermott.....	124 27,150	1945	Armed (4).....	D. Dodson.....	124 20,750
un Beau (4).....	F. Coltilet.....	126 26,100	1946	Seven Hearts (6).....	W. Hanka.....	119 19,850
un Beau (5).....	F. Coltilet.....	125 26,300				

WASHINGTON PARK FUTURITY

Washington Park; 2-year-olds; 3/4 mile.

Winner	Jockey	Wt. Win val.	Year	Winner	Jockey	Wt. Win val.
iger.....	A. Robertson.....	117 \$26,135	1943	Occupy.....	L. Whiting.....	113 43,625
orter's Cap.....	C. Bierman.....	117 30,780	1944	Free for All.....	O. Grohs.....	122 47,850
Isab.....	R. L. Vedder.....	119 32,575	1945	Revoked.....	A. Bodiou.....	118 56,700
ccupation.....	L. Balaski.....	122 58,475	1946	Education.....	V. Adams.....	118 65,125

WASHINGTON PARK HANDICAP

Washington Park; 3-year-olds and over; 1¼ miles.

Since 3/4 mile from 1927 to 1934, inclusive, and in 1938; 1½ miles in 1939. Run as Washington Park Handicap Stakes in 1935.

Winner, age	Jockey	Wt. Win val.	Year	Winner, age	Jockey	Wt. Win val.
Smiling Gus (3).....	L. Edwards.....	97 \$10,710	1938	Dora May (5).....	K. McCombs.....	108 1,650
irl Scout (5).....	S. Cooper.....	104 6,490	1939	Star Boarder (3).....	A. Bodiou.....	105 4,350
isstep (4).....	C. McCrossen.....	124 5,510	1940	War Plumage (4).....	N. Wall.....	110 24,800
isstep (5).....	E. Shropshire.....	126 6,410	1941	Big Pebble (5).....	J. Westrope.....	120 25,500
annery (4).....	R. Heigle.....	112 6,210	1942	Marriage (6).....	C. Corbett.....	114 25,200
old Step (5).....	H. Schutte.....	107 5,290	1943*	Thumbs Up (4).....	O. Grohs.....	120
o More (5).....	E. Arcaro.....	109 2,295		Royal Nap (3).....	W. Mehrtens.....	107 25,950
saiah (4).....	J. Kacala.....	110 2,240	1944	Equifox (7).....	A. Bodiou.....	113 40,700
ate Date (6).....	A. Robertson.....	111 4,220	1945	Busher (3).....	J. Longden.....	115 40,200
Where Away (4).....	C. Corbett.....	115 8,080	1946	Armed (5).....	D. Dodson.....	130 39,300

ad heat.

FAMOUS HORSE RACING COLORS

Ranch—Brown, white running "W"
 ont and back, white sleeves, brown
 op, quartered cap.
 ae Chance Farm—Red, white sash, blue
 ffes and cap.
 erbilt, A. G.—Cerise, white diamonds,
 rise sleeves, white cap.
 bs, Mrs. Ethel D.—Salmon pink, em-
 ald green hoops, salmon pink sleeves
 ad cap.

Widener, George D.—Light blue, dark blue
 hoops, dark blue cap.
 Whitney, C. V.—Light blue, brown cap.
 Jeffords, W. M.—Green and white stripes,
 green sleeves and cap.
 Ziegler, William, Jr.—Purple, red hoops on
 sleeves, red cap.
 Wheatley Stable—Yellow, purple sleeves
 and cap.

WESTCHESTER HANDICAP

Empire City: 3-year-olds and over; 1 3/16 miles.

Run as Victory Handicap in 1919 and as the Yorktown Handicap in 1918 and from 1922 to 1939, inclusive. Distance 1 1/4 miles in 1919, 1920, and 1921; and 1 1/8 miles in 1918 and from 1922 to 1939, inclusive. Run at Jamaica from 1943 to 1946, inclusive.

Year	Winner, age	Jockey	Wt.	Win val.	Year	Winner, age	Jockey	Wt.	Win val.
1918	George Smith (5)	F. Robinson	127	\$ 2,150	1934	King Saxon (3)	T. Malley	118	1,925
1919	Star Master (5)	C. Kummer	125	2,275	1935	Good Harvest (3)	S. Renick	106	4,550
1920	Mad Hatter (4)	E. Sande	126	4,550	1936	Thorson (4)	E. Arcaro	112	4,790
1921	Yellow Hand (4)	C. H. Miller	132	4,850	1937	Thorson (5)	S. Roberts	116	7,550
1922	Prince James (4)	E. Taplin	119	5,150	1938	Great Union (3)	S. Renick	107	6,550
1923	Hephaistos (4)	M. Fator	100	4,860	1939	Third Degree (3)	E. Arcaro	123	7,250
1924	Mad Play (3)	L. Fator	124	5,510	1940	Mioland (3)	L. Haas	119	15,950
1925	Aga Khan (4)	F. Stevens	129	4,990	1941	Gramps (4)	H. Lindberg	105	19,650
1926	Cloudland (4)	L. Fator	109	4,970	1942	Riverland (4)	A. Robertson	114	19,850
1927	Light Carbine (4)	C. Zoeller	106	5,390	1943	Slide Rule (3)	J. Westrope	119	22,700
1928	Arcturus (3)	G. Schreiner	100	4,970	1944	Seven Hearts (4)	P. Keiper	124	23,515
1929	Genie (4)	W. Kelsay	110	4,930	1945	Stymie (4)	R. Permane	125	38,765
1930	Questionnaire (3)	C. Kurtsinger	129	4,650	1946	Assault (3)	E. Arcaro	122	38,600
1931	Dr. Freeland (5)	J. Bethel	120	2,880					

WIDENER

Hialeah Park: 3-year-olds and over; 1 1/4 miles

Run as Widener Challenge Cup Handicap prior to 1938. Run as Widener Handicap from 1938 to 1944, inclusive.

Year	Winner, age	Jockey	Wt.	Win val.	Year	Winner, age	Jockey	Wt.	Win val.
1936	Mantagna (4)	E. Litzenger	109	\$10,150	1941	Big Pebble (5)	G. Seabo	109	51,800
1937	Columbiana (4)	H. Le Blanc	103	52,000	1942	The Rhymer (4)	E. Arcaro	111	53,950
1938	War Admiral (4)	C. Kurtsinger	130	49,550	1944	Four Freedoms (4)	E. Arcaro	109 1/2	29,350
1939	Bull Lea (4)	I. Anderson	119	46,450	1946	Armed (5)	D. Dodson	128	45,700
1940	Many Stings (5)	R. Donoso	109	52,000					

WITHERS STAKES

Belmont Park: 3-year-olds; 1 mile

Run at Jerome Park prior to 1890. Run at Morris Park from 1891 to 1904, inclusive.

Year	Winner	Jockey	Wt.	Win val.	Year	Winner	Jockey	Wt.	Win val.
1874	Dublin	Ponton	110	\$3,200	1910	The Turk	M. McGee	126	3,600
1875	Aristides	Swim	110	4,150	1913	Rock View	Butwell	118	2,325
1876	Fiddlesticks	Feakes	110	3,500	1914	Charlestonian	C. Burlingame	115	2,900
1877	Bombast	Barrett	110	4,200	1915	The Finn	G. Byrne	118	1,425
1878	Duke of Magenta	Hughes	118	3,500	1916	Spur	J. Loftus	118	2,900
1879	Dan Sparling	Kelly	118	5,305	1917	Houffess	J. Butwell	118	5,475
1880	Ferncliffe	Barrett	118	3,800	1918	Motor Cop	E. Taplin	118	7,100
1881	Crickmore	Hughes	115	4,275	1919	Sir Barton	J. Loftus	118	8,075
1882	Forester	J. McLaughlin	118	4,600	1920	Man o' War	C. Kummer	118	4,825
1883	Geo. Kinney	J. McLaughlin	118	2,990	1921	Leonardo II	A. Schuttinger	118	5,475
1884	Panique	Fitzpatrick	118	3,240	1922	Snob II	C. Kummer	118	17,050
1885	Tyrant	P. Duffy	118	3,070	1923	Zev	E. Sande	118	18,300
1886	Biggonet	Maynard	113	3,260	1924	Bracadale	E. Sande	118	19,000
1887	Hanover	J. McLaughlin	118	3,490	1925	American Flag	A. Johnson	118	19,600
1888	Sir Dixon	Fitzpatrick	118	3,620	1926	Haste	E. Sande	118	22,800
1889	Diablo	Godfrey	121	5,380	1927	Chance Shot	E. Sande	118	23,250
1890	King Eric	Garrison	110	8,140	1928	Victorian	R. Workman	118	22,300
1891	Picknicker	F. Littlefield	117	4,190	1929	Blue Larkspur	M. Garner	118	28,250
1892	Tammany	Garrison	122	7,460	1930	Whichone	R. Workman	118	26,150
1893	Dr. Rice	Taral	122	9,470	1931	Whicetown	L. McAtee	118	27,300
1894	Domino	Taral	122	7,100	1932	Boatswain	A. Robertson	118	21,600
1895	Lucania	Reiff	109	2,700	1933	The Darb	A. Robertson	118	20,550
1896	Handspring	Simms	122	2,550	1934	Singing Wood	R. Jones	118	16,000
1897	Octagon	Simms	119	2,550	1935	Rosemont	W. D. Wright	118	11,250
1898	The Huguenot	Spencer	122	3,815	1936	White Cockade	E. Litzenger	118	18,200
1899	Jean Bereaud	Clawson	122	4,450	1937	Flying Scot	J. Gilbert	118	15,050
1900	Kilmarnock	N. Turner	126	5,470	1938	Menow	C. Kurtsinger	118	15,000
1901	The Parader	Landry	126	5,020	1939	Johnstown	J. Stout	118	15,750
1902	Compute	Shaw	126	4,815	1940	Corydon	E. Arcaro	118	16,650
1903	Shorthose	Haack	126	6,395	1941	King Cole	J. Gilbert	118	20,300
1904	Delhi	Odom	126	5,750	1942	Alsab	B. James	126	15,500
1905	Blandy	W. Davis	126	6,220	1943	Count Fleet	J. Longden	126	12,700
1906	Accountant	J. Martin	126	6,850	1944	Who Goes There	J. Longden	126	16,150
1907	Frank Gill	Notter	126	7,775	1945	Polynesian	W. D. Wright	126	19,125
1908	Colin	Notter	126	12,090	1946	Hampden	E. Arcaro	126	20,320
1909	Hilarious	Butwell	126	11,070					

WOOD MEMORIAL

Jamaica; 3-year-olds; 1 1/16 miles

Run as Wood Stakes prior to 1927. Distance 1 mile and 70 yards from 1925 to 1939, inclusive. Run as Wood Memorial Stakes from 1927 to 1941, inclusive. Run in two divisions in 1944 and 1945.

Year	Winner	Jockey	Wt.	Win. val.	Year	Winner	Jockey	Wt.	Win. val.
1937	Backbone.....	J. Parke.....	110	\$7,600	1937	Melodist.....	J. Longden.....	120	19,150
1938	Pompey.....	B. Breuning.....	120	8,700	1938	Fighting Fox.....	J. Stout.....	120	17,450
1939	Saxon.....	G. Ellis.....	117	9,050	1939	Johnstown.....	J. Stout.....	120	17,675
1940	Distraction.....	D. McAuliffe.....	120	11,300	1940	Dit.....	L. Haas.....	120	19,225
1941	Essare.....	M. Garner.....	110	11,000	1941	Market Wise.....	D. Meade.....	120	16,650
1942	Gallant Fox.....	E. Sande.....	120	10,150	1942	Requested.....	W. D. Wright.....	120	22,900
1943	Twenty Grand.....	C. Kertsinger.....	120	10,200	1943	Count Fleet.....	J. Longden.....	126	20,150
1944	Universe.....	L. McAtee.....	120	10,400	1944	Stir Up.....	E. Arcaro.....	126	19,625
1945	Mr. Khayyam.....	P. Walls.....	122	3,760	1944	Lucky Draw.....	J. Longden.....	126	20,115
1946	High Quest.....	D. Bellizzi.....	120	3,990	1945	Jeep.....	A. Kirkland.....	126	18,945
1947	Today.....	R. Workman.....	112	11,350	1945	Hoop Jr.....	E. Arcaro.....	126	18,945
1948	Teufel.....	E. Litzenberger.....	112	10,775	1946	Assault.....	W. Mehrtens.....	126	22,600

YANKEE HANDICAP

Suffolk Downs; 3-year-olds; 1 3/16 miles.

Distance 1 1/8 miles in 1935.

Year	Winner	Jockey	Wt.	Win. val.	Year	Winner	Jockey	Wt.	Win. val.
1935	Ann O'Ruley.....	T. Luther.....	117	\$4,275	1941	Our Boots.....	C. McCreary.....	112	24,375
1936	Memory Book.....	S. Coucci.....	118	13,350	1942	Shut Out.....	E. Arcaro.....	126	22,775
1937	War Minstrel.....	C. Kertsinger.....	113	9,525	1944	Whirlabout.....	H. Lindberg.....	110	22,475
1938	Cravat.....	R. Merritt.....	104	12,100	1945	Sea Swallow.....	H. Woodhouse.....	113	25,675
1939	Challedon.....	H. Richards.....	124	13,000	1946	Cable.....	H. Lindberg.....	109	23,475
1940	Pass Out.....	J. Wagner.....	110	13,950					

Other Stake Winners in 1946

(This compilation does not include victors listed in tabular matter.)

Abbreviations used—(AQ) Aqueduct; (AP) Arlington Park; (AC) Atlantic City; (BM) Bay Meadows; (B) Belmont Park; (BO) Bowie; (CD) Churchill Downs; (DP) Delaware Park; (EC) Empire City; (FG) Fair Grounds, New Orleans; (GS) Garden State; (GP) Gulfstream Park; (HG) Havre de Grace; (HP) Hialeah Park; (HA) Hipodromo de las Americas; (HAW) Hawthorne Park; (HO) Hollywood Park; (J) Jamaica; (K) Keeneland; (LF) Lincoln Fields; (MP) Monmouth Park; (N) Narragansett Park; (P) Pimlico; (S) Saratoga; (SA) Santa Anita Park; (SD) Suffolk Downs; (TP) Tropical Park; (WP) Washington Park; (WO) Woodbine Park.

Stake, track and winner	Win value	Stake, track and winner	Win value
Acorn (B)—Earshot	\$ 9,480	Champagne (B)—Donor	\$20,550
Alabama (S)—Hypnotic	18,250	Chevy Chase Steeplechase (Laurel)	
Al America (AC)—Turbine	22,500	—Refugio	10,850
American (HO)—Quick Reward	39,750	Chicago (WP)—Seven Hearts	19,850
Anita Chiquita (SA)—Judy Rae	22,440	Choice (MP)—Lovat	21,490
Aqueduct (AQ)—Coincidence	12,100	Churchill Downs Special (CD)—	
Ardsley (EC)—Phalanx	17,200	Tiger Rebel	20,700
Astronaut (HO)—Occupy	18,050	Cleopatra (AP)—Athenia	19,700
Arkansas Derby (OP)—Bob Murphy	7,460	Comely (EC)—Bonnie Beryl	16,700
Artful (WP)—Athenia	19,200	Correction (J)—Recce	13,300
Autumn Day (EC)—Keynote	12,000	Delaware Oaks (DP)—Bonnie Beryl	13,970
Babylon (AQ)—Royal Governor	9,225	Del Mar (Del Mar)—Olhaverly	12,100
Bay Shore (AQ)—Gallorette	12,350	Demoiselle (EC)—Carolyn A.	33,550
Betsy Ross (SD)—Mother	11,000	Derby Mexicano (HA)—Plucky Flag	16,130
Beaverly (WP)—Be Faithful	22,000	Derby Trial (CD)—Rippee	9,775
Black Helen (HP)—Adroit	22,700	Diamond State (DP)—Flash Burn	14,570
Blue Grass (K)—Lord Boswell	10,450	Dick Welles (AP)—Lord Boswell	24,650
Breeders' Futurity (K)—Education	16,338	Discovery (AQ)—Mighty Story	20,050
Brock Steeplechase (B)—Burma		Double Event (1st div.) (TP)—	
Road	13,750	Armed	15,325
C. American Oaks (B)—Hypnotic	21,180	Double Event (2d div.) (TP)—	
California Breeders' Champion		Armed	14,825
(SA)—Honeymoon	20,165	Drexel (WP)—Honeymoon	19,050
California Derby (BM)—War Spun	17,250	East View (EC)—Grand Admiral	34,300

Other Stake Winners in 1946—(cont.)

Stake, track and winner	Win value	Stake, track and winner	Win value
Edgemere (AQ)—Stymie	\$19,750	Modesty (AP)—Athene	\$19,400
Equipoise Mile (AP)—Witch Sir	24,200	Molly Pitcher (MP)—Mahmoudess	13,600
Exterminator (P)—Miss Grillo	14,075	Monmouth (MP)—Lucky Draw	22,970
Fall Highweight (B)—Cassiss	16,750	Myrtlewood (AP)—Fighting Don	18,800
Fashion (B)—First Flight	10,850	National Stallion (B)—Jet Pilot	15,690
Flash (S)—Gestapo	10,450	New Castle (DP)—Bridal Flower	20,200
Frizette (J)—Bimlette	14,650	New Orleans (FG)—Hillyer Court	19,650
Garden State (GS)—Double Jay	26,150	New Rochelle (EC)—Class Day	16,000
Gazelle (AQ)—Bridal Flower	16,950	New York (B)—Stymie	41,200
George Woolf Memorial (WP)—Colonel O'F	17,150	Olympic (AC)—Lucky Draw	22,450
Golden State Breeders (HO)—Honeymoon	20,550	Paumonok (J)—Fighting Step	8,000
Grand Union Hotel (S)—Blue Border	14,975	Peabody Memorial (LF)—Mighty Story	18,425
Grassland (AP)—Frere Jacques	20,400	Philadelphia (HG)—Armed	18,350
Grayson (P)—Megogo	13,950	Pimlico Cup (P)—Rico Monte	23,350
Great American (AQ)—I Will	9,825	Pimlico Oaks (P)—Red Shoes	20,150
Great Western (WP)—Fighting Frank	18,900	Princess Doreen (AP)—Sea Snack	20,550
Grey Lag (J)—Stymie	24,750	Princess Pat (WP)—Say Blue	50,275
Gulfstream (GP)—Do-Reigh-Mi	11,000	Pollyanna (1st div.) (AP)—War Fan	19,325
Haggin (HO)—Shim Malone	21,450	Pollyanna (2d div.) (AP)—Miss Kimo	19,525
Handicap de las Americas (HA)—Height o'Land	20,450	Prairie State (WP)—Education	20,550
Hannah Dustin (SD)—Elpis	13,750	Providence (N)—Pellicle	13,220
Havre de Grace (HG)—Biscalluz	19,450	Quaker City (GS)—Alexis	14,000
Hawthorne Juvenile (HAW)—Education	12,200	Remsen (J)—Phalanx	18,000
Hawthorne Speed (HAW)—Daily Trouble	11,750	Rhode Island (N)—Man O'Glory	13,260
Hollywood Derby (HO)—Honeymoon	39,300	Riggs (P)—Polynesian	23,100
Hollywood Laddie (HO)—Stepfather	21,550	Roamer (J)—Bridal Flower	22,700
Hollywood Lassie (HO)—U Time	19,650	Rosedale (J)—Miss Kimo	9,925
Hollywood Oaks (HO)—Honeymoon	16,500	Rowe Memorial (BO)—Swiv	6,375
Hollywood Premiere (HO)—Happy Issue	18,550	San Antonio (SA)—First Fiddle	44,710
Hyde Park (AP)—Colonel O'F	17,750	San Carlos (SA)—Sirde	20,380
Inglewood (HO)—Quick Reward	20,200	San Felipe (SA)—Galla Damion	17,505
Interborough (J)—True North	17,750	San Gabriel (SA)—Sun Lady	17,890
Jerome (B)—Mahout	14,400	San Juan Capistrano (SA)—Triplicate	40,030
Jersey (GS)—Mahout	24,200	San Pasqual (SA)—Lou-Bre	41,930
Keeneland Special (K)—Pellicle	19,950	San Vicente (SA)—Air Rate	18,550
Kent (DP)—Natchez	22,100	Sanford (S)—Donor	8,375
Kentucky Jockey Club (CD)—Double Jay	22,680	Santa Barbara (SA)—Whirlabout	18,200
Kentucky Oaks (CD)—First Page	9,175	Santa Catalina (SA)—Nanby Pass	40,630
King Neptune (AC)—Miss Kimo	13,050	Santa Margarita (SA)—Canina	39,300
King's Plate (WO)—Kingarvie	10,400	Santa Maria (SA)—Honeymoon	17,205
Ladies' (B)—Athenia	16,700	Santa Susana (SA)—Enflade	19,440
Lawrence Realization (B)—School Tie	18,300	Saratoga Cup (S)—Stymie (walk over)	6,125
Lincoln (LF)—Historian	11,525	Sequoia (HO)—Honeymoon	17,550
Longacres Mile (Longacres)—Amble In	18,150	Sheridan (WP)—Armed	23,850
Louisiana Derby (FG)—Pellicle	11,675	Shriners' (BM)—Occupy	19,000
Manhattan (B)—Stymie	20,050	Skokie (AP)—Rippee	19,450
Marguerite (P)—Cosmic Missile	24,640	Spinaway (S)—Pipette	16,875
Matron (B)—First Flight	35,535	Starlet (HO)—U Time	21,900
Matron (AP)—Good Blood	22,850	Sunset (HO)—Historian	37,150
McLennan (HP)—Concordian	25,300	Sussex (DP)—Pavot	20,900
Meadowland (WP)—Mighty Story	16,050	Toboggan (B)—Polynesian	11,650
Merchants' and Citizens' (S)—Lucky Draw	13,250	Top Flight (B)—Sicily	17,400
Mermaid (AC)—Sea Snack	13,275	Trenton (GS)—Turbine	46,700
Metropolitan (B)—Gallorette	22,050	U. S. Hotel (S)—I Will	14,275
Misty Isle (WP)—Athenia	22,850	Vineland (GS)—Good Blood	21,000
		Walden (P)—Fervent	26,650
		Whirlaway (WP)—Armed	31,225
		Whitney (S)—Stymie	19,350
		Will Rogers (HO)—Burra Sahib	20,100
		Wilson (S)—Pavot	17,500
		Youthful (J)—Eternal War	10,150

THE JOCKEY CLUB

Though its original charter was dated Feb. 8, 1894, The Jockey Club, parent body of the American turf, might well be considered as having completed its fifty-fifth year of service to thoroughbred racing in 1946 because the Board of Control, forerunner of The Jockey Club, was organized in 1891. Membership is limited to fifty, with The Earl of Derby the only honorary member.

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WORLD RECORDS

Distance	Horse, age, weight, track and date	Time
¼	Big Racket, 4, 111, Hipodromo de las Americas, Mexico City, Mexico; February 5, 1945.....	:20½
2½ f	Jack Oldham, 2, 117, Hipodromo de las Americas, Mexico City, Mexico; April 1, 1945.....	:27½
	Woven Web, 2, 114, Hipodromo de las Americas, Mexico City, Mexico; April 22, 1945.....	:27½
¾	Don Conejo, 2, 122, Santa Anita Park, Arcadia, Calif., Feb. 1, 1946.....	:32¾
	Distaff, 2, 119, Santa Anita Park, Arcadia, Calif., Feb. 22, 1946.....	:32¾
3½ f	Joe Blair, 5, 115, Juarez, Mexico; February 5, 1916.....	:39
½	Tie Score, 4, 111, Hipodromo de las Americas, Mexico City, Mexico; April 1, 1945.....	:45¾
4½ f	Hoyle, 2, 105, Aqueduct, Long Island, N. Y.; April 16, 1908.....	:52
¾	Pan Zareta, 5, 120, Juarez, Mexico; February 10, 1915.....	:57¾
5½ f	Nance's Ace, 3, 112, Tropical Park, Coral Gables, Fla.; December 27, 1944.....	1:03¼
5¾ f	Fighting Fox, 4, 126, Empire City, Yonkers, N. Y.; July 8, 1939.....	1:07¾
¾	*Gelding by Broken Tendril, 3, 123, Brighton, England; August 6, 1929.....	1:06¼
	Clang, 3, 110, Coney Island, Cincinnati, Ohio; October 12, 1935.....	1:09¼
	Mafosta, 4, 116, Longacres, Seattle, Wash.; July 14, 1946.....	1:09¼
	Polynesia, 4, 126, Atlantic City, Mays Landing, N. J.; Sept. 16, 1946.....	1:09¼
6½ f	Snark, 4, 109, Hialeah Park, Miami, Fla.; February 9, 1937.....	1:15¼
¾	Roseben, 5, 126, Belmont Park, Long Island, N. Y.; October 16, 1906.....	1:22
	Clang, 3, 105, Arlington Park, Arlington Heights, Ill.; July 19, 1935.....	1:22
	High Resolve, 4, 126, Hollywood Park, Inglewood, Calif.; October 17, 1945.....	1:22
1	Equipoise, 4, 128, Arlington Park, Arlington Heights, Ill.; June 30, 1932.....	1:34¾
1mi.70yd.	South Dakota, 3, 122, River Downs, Cincinnati, Ohio; August 4, 1945.....	1:40
1¼	Snow Boots, 4, 117, Santa Anita Park, Arcadia, Calif.; Jan. 11, 1946.....	1:41¾
1½	Indian Broom, 3, 94, Tanforan, San Bruno, Calif.; April 11, 1936.....	1:47¾
1¾	Challidon, 3, 120, Keeneland, Lexington, Ky.; October 10, 1939.....	1:54¾
	Lucky Draw, 5, 123, Narragansett Park, Pawtucket, R. I.; Sept. 14, 1946.....	1:54¾
1¼	Saint Andrews II, 7, 133, Brighton, England; June 21, 1939.....	1:59¾
1¾	Man o' War, 3, 126, Belmont Park, Long Island, N. Y.; June 12, 1920.....	2:14¾
1½	The Bastard, 3, 124, Newmarket, England; October 18, 1929.....	2:23
1¾	Man o' War, 3, 126, Belmont Park, Long Island, N. Y.; September 4, 1920.....	2:40¾
	Historian, 5, 121, Hollywood Park, Inglewood, Calif.; Aug. 3, 1946.....	2:40¾
1mi.5½f	Distribute, 9, 109, River Downs, Cincinnati, Ohio; September 7, 1940.....	2:51¾
1¾	Buen Ojo, a, 133, Montevideo, Uruguay, S. A.; January 8, 1922.....	2:52¾
1¾	Bold Courtier, 4, 116, Agua Caliente, Mexico; August 8, 1937.....	3:15¾
2	Polazel, 3, ..., Salisbury, England; July 8, 1924.....	3:15
2mi.40yd.	Winning Mark, 4, 107, Thistle Down Park, Cleveland, Ohio; July 20, 1940.....	3:29¾
2mi.70yd.	Filisteo, 7, 116, Pimlico, Md.; October 30, 1941.....	3:30¾
2¼	Momo Flag, 4, 120, Narragansett Park, Pawtucket, R. I.; September 27, 1944.....	3:33¾
2½	Centurion, 5, 119, Newbury, England; September 29, 1923.....	3:35
2¾	Santiago, 5, 112, Narragansett Park, Pawtucket, R. I.; September 27, 1941.....	3:51¼
2¼	Dakota, 4, 116, Lingfield, England; May 27, 1927.....	3:37¾
2¾	Wiki Jack, 4, 97, Tijuana, Mexico; February 8, 1925.....	4:15
2½	Golden Myth, 4, 126, Ascot Heath, Ascot, England; June 5, 1922.....	4:16¾
2¾	†Worthman, 5, 101, Tijuana, Mexico; February 22, 1925.....	4:51¾
2¾	Shot Put, 4, 126, Washington Park, Homewood, Ill.; August 14, 1940.....	4:48¾
2¾	†Bosh, 5, 100, Tijuana, Mexico; March 8, 1925.....	5:23
3	Farragut, 5, 113, Agua Caliente, Mexico; March 9, 1941.....	5:15
3¾	Winning Mark, 4, 104, Washington Park, Homewood, Ill.; August 21, 1940.....	6:13
4	Sotemia, 5, 119, Churchill Downs, Louisville, Ky.; October 7, 1912.....	7:10¾

*¾ mile course at Brighton is started from a hill and is down grade to within one-third of a mile of the finish. †Track heavy. ‡Track sloppy.

Straight Course

Distance	Horse, age, weight, track and date	Time
¼	Bob Wade, 4, 122, Butte, Mont.; August 20, 1890.....	:21¼
¾	Galley Slave, 2, 118, Santa Anita Park, Arcadia, Calif.; January 27, 1938.....	:32¾
½	Gloaming, 6, 127, Trentham, Wellington, New Zealand; January 12, 1921.....	:45
4½ f	Preceptor, 2, 112, Belmont Park, Long Island, N. Y.; May 19, 1908.....	:51
	Orissa, 2, 119, Belmont Park, Long Island, N. Y.; June 4, 1928.....	:51
¾	Devineress, 3, 103, Epsom Downs, Epsom, England; June 2, 1933.....	:54¾
5½ f	Plater, 2, 107, Morris Park, New York, N. Y.; October 21, 1902.....	1:02¾
¾	Artful, 2, 130, Morris Park, New York, N. Y.; October 15, 1904.....	1:08
6½ f	Porter's Mite, 2, 119, Belmont Park, Long Island, N. Y.; September 17, 1938.....	1:14¾
*Abt¾	High Strung, 2, 122, Belmont Park, Long Island, N. Y.; September 15, 1928.....	1:19
¾	First Edition, 4, 126, Hurst Park, Hampton Court, England; May 25, 1926.....	1:20
1	Mopsus, 3, 105, Brighton, England; June 22, 1939.....	1:32
1¼	Banquet, 3, 108, Monmouth Park, New Jersey; July 17, 1890.....	2:03¾

*165 feet short of 7/8 mile.

Whirlaway's Money-winning Record

(Bred and Owned by Warren Wright, Calumet Farm.)

1940								
#	Track	Race	Dist.	Wt.	Fin.	Time	Odds	Earnings
3	Lincoln Fields	Hammond Purse	5/8	116	1	1:01 1/4	3-2	\$ 600
5	Arlington Park	Oak Park Purse	5 1/2 f	111	3	1:05 3/4	29-10	100
2	Arlington Park	Chicago Heights Purse	5 1/2 f	111	1	1:05 3/4	17-5	700
6	Arlington Park	Hyde Park Stakes	5 1/2 f	117	4	1:04 1/4	17-5	250
10	Arlington Park	Nedays Stakes	5 1/2 f	117	4	1:05 1/4	39-10	50
7	Arlington Park	Arlington Futurity	3/4	117	3	1:13 3/4	9-1	3,000
3	Saratoga	United States Hotel Stakes	3/4	116	2	1:11 1/4	14-1	1,000
0	Saratoga	Saratoga Special	3/4	122	1	1:11 1/4	39-20	9,750
4	Saratoga	Grand Union Hotel Stakes	3/4	122	2	1:11	6-5	1,000
1	Saratoga	Hopeful Stakes	6 1/2 f	122	1	1:18	13-20	37,850
4	Belmont Park	Futurity Trial	3/4 s	123	5	1:10 3/4	13-10	
8	Belmont Park	Futurity Stakes	6 1/2 f s	126	3	1:15 3/4	14-5	4,800
8	Keeneland	Myrtlewood Purse	3/4	122	1	1:11 1/4	7-5	700
9	Keeneland	Breeders' Futurity	3/4	122	1	1:11 1/4	3-2	7,835
2	Pimlico	Pimlico Futurity	1 1/4	122	3	1:49 3/4	8-5	1,500
4	Pimlico	Walden Stakes	1 1/4	122	1	1:52 3/4	3-2	8,140
							Total....	\$ 77,275

1941								
#	Track	Race	Dist.	Wt.	Fin.	Time	Odds	Earnings
8	Hialeah Park	Coconut Grove Purse	3/4	117	1	1:11 3/4	13-20	\$ 1,100
18	Hialeah Park	Arcadia Purse	3/4	122	3	1:23 3/4	3-10	100
22	Tropical Park	Miami Springs Purse	3/4	118	3	1:11 1/4	17-20	100
28	Tropical Park	Silver Springs Purse	5 1/2 f	118	1	1:04 3/4	24-1	850
11	Keeneland	A. J. Joyner Handicap	3/4	120	1	1:11 1/4	1-1	1,108
24	Keeneland	Blue Grass Stakes	1 1/4	123	2	1:51 1/4	1-2	3,026
9	Churchill Downs	Derby Trial	1	118	2	1:36 3/4	3-5	500
3	Churchill Downs	Kentucky Derby	1 1/4	126	1	2:01 3/4	29-10	61,275
10	Pimlico	Preakness Stakes	1 3/4	126	1	1:58 3/4	23-20	49,365
20	Belmont Park	Henry of Navarre Purse	1 1/4	108	1	1:43 3/4	3-4	1,650
7	Belmont Park	Belmont Stakes	1 1/2	126	1	2:31	1-4	39,770
21	Aqueduct	Dwyer Stakes	1 1/4	126	1	2:03 3/4	1-5	8,075
15	Arlington Park	Special Event Purse	1 1/4	120	1	1:50 3/4	1-10	3,250
26	Arlington Park	Classic Stakes	1 1/4	126	2	2:02 3/4	2-5	7,500
6	Saratoga	Saranac Handicap	1	130	1	1:38	13-20	3,800
16	Saratoga	Travers Stakes	1 1/4	130	1	2:05 3/4	3-20	16,900
23	Washington Park	American Derby	1 1/4	126	1	2:04	1-5	44,975
3	Narragansett Park	Narragansett Special	1 3/4	118	2	1:57 1/4	2-5	4,000
20	Belmont Park	Lawrence Realization Stakes	1 1/4	126	1	2:44 3/4	1-5	23,050
27	Belmont Park	The Jockey Club Gold Cup	2	114	2	3:20 3/4	7-20	2,000
							Total.....	\$272,386

1942								
#	Track	Race	Dist.	Wt.	Fin.	Time	Odds	Earnings
9	Keeneland	Phoenix Handicap	3/4	128	2	1:13 3/4	3-5	\$500
15	Keeneland	Sesqui-Centennial Handicap	3/4	126	2	1:12 3/4	1-2	225
25	Churchill Downs	Clark Handicap	1 1/4	127	1	1:44 1/4	1-10	2,150
6	Pimlico	Dixie Handicap	1 3/4	128	1	1:57	33-20	19,275
30	Belmont Park	Suburban Handicap	1 1/4	129	2	2:01 1/4	1-1	6,000
13	Aqueduct	Carer Handicap	3/4	130	3	1:23	23-10	750
22	Aqueduct	Celt Purse	1 1/4	122	1	1:49 3/4	3-10	2,275
27	Aqueduct	Brooklyn Handicap	1 1/4	128	1	2:02 3/4	9-20	23,650
4	Empire City	Butler Handicap	1 3/4	132	2	1:56 3/4	3-4	6,000
15	Suffolk Downs	Massachusetts Handicap	1 1/4	130	1	1:48 3/4	1-1	43,850
1	Arlington Park	Arlington Handicap	1 1/4	130	2	2:04	3-10	4,000
29	Garden State Park	Trenton Handicap	1 1/4	130	1	1:50 3/4	3-10	8,500
12	Narragansett Park	Narragansett Special	1 3/4	130	1	1:56 3/4	2-5	24,300
19	Narragansett Park	Match Race	1 3/4	126	2	1:56 3/4	3-10	
26	Belmont Park	Manhattan Handicap	1 1/2	132	2	2:27 3/4	7-10	2,000
3	Belmont Park	Jockey Club Gold Cup	2	124	1	3:21 3/4	11-20	18,350
10	Belmont Park	New York Handicap	2 1/4	130	3	3:47 3/4	21-20	2,500
24	Laurel Park	Washington Handicap	1 1/4	130	1	2:03 3/4	13-20	14,350
28	Pimlico	Pimlico Special	1 3/4	126	*	2:05 3/4	No bet'g	10,000
3	Pimlico	Riggs Handicap	1 3/4	130	2	1:59 3/4	9-20	1,500
11	Pimlico	Governor Bowie Handicap	1 1/4	129	1	2:48 3/4	7-20	8,625
12	Fair Grounds	Louisiana Handicap	1 1/4	130	1	1:53	3-5	12,450
							Total.....	\$211,250

Whirlaway's Money-winning Record—(cont.)

1943									
Date	Track	Race	Dist.	Wt.	Fin.	Time	Odds	Earnings	
June 22	Washington Park	War Admiral Purse	1	122	3	1:37 $\frac{3}{4}$	1-2	\$250	
June 26	Washington Park	Equipoise Mile	1	126	5	1:37	13-10		
Total								\$250	

RECAPITULATION

Year	Age	Sts.	1st	2d	3d	Unp.	Earnings
1940	2	16	7	2	4	3	\$ 77,275
1941	3	20	13	5	2	0	272,394
1942	4	22	12	8	2	0	211,250
1943	5	2	0	0	1	1	250
Totals		60	32	15	9	4	\$561,161

Man o' War's Record

(Bred by August Belmont. Owned by Glen Riddle Farm.)

1919									
Date	Track	Race	Dist.	Wt.	Fin.	Time	Odds	Earnings	
June 6	Belmont Park	Purse	$\frac{5}{8}$ st	115	1	:59	3-5	\$ 50	
June 9	Belmont Park	Keene Memorial Stakes	$5\frac{1}{2}$ f st	115	1	1:05 $\frac{3}{4}$	7-10	4,200	
June 21	Jamaica	Youthful Stakes	$5\frac{1}{2}$ f	120	1	1:06 $\frac{3}{4}$	1-2	3,850	
June 23	Aqueduct	Hudson Stakes	$\frac{3}{4}$	130	1	1:01 $\frac{1}{2}$	1-10	2,825	
July 5	Aqueduct	Tremont Stakes	$\frac{3}{4}$	130	1	1:13	1-10	4,800	
Aug. 2	Saratoga	United States Hotel Stakes	$\frac{3}{4}$	130	1	1:12 $\frac{3}{4}$	9-10	7,600	
Aug. 13	Saratoga	Sanford Memorial Stakes	$\frac{3}{4}$	130	2	1:11 $\frac{1}{2}$	11-20	700	
Aug. 23	Saratoga	Grand Union Hotel Stakes	$\frac{3}{4}$	130	1	1:12	11-20	7,600	
Aug. 30	Saratoga	Hopeful Stakes	$\frac{3}{4}$	130	1	1:13	9-20	24,600	
Sept. 13	Belmont Park	Belmont Futurity	$\frac{3}{4}$ st	127	1	1:11 $\frac{3}{4}$	1-2	26,600	
Total								\$83,325	

1920

Date	Track	Race	Dist.	Wt.	Fin.	Time	Odds	Earnings	
May 18	Pimlico	Preakness Stakes	1 $\frac{1}{2}$	126	1	1:51 $\frac{1}{2}$	4-5	\$23,000	
May 29	Belmont Park	Withers Stakes	1	118	1	1:35 $\frac{1}{2}$	1-7	4,825	
June 12	Belmont Park	Belmont Stakes	1 $\frac{1}{2}$	126	1	2:14 $\frac{1}{2}$	1-25	7,950	
June 22	Jamaica	Stuyvesant Handicap	1	135	1	1:41 $\frac{1}{2}$	1-100	3,850	
July 10	Aqueduct	Dwyer Stakes	1 $\frac{1}{2}$	126	1	1:49 $\frac{1}{2}$	1-5	4,850	
Aug. 7	Saratoga	Miller Stakes	1 $\frac{1}{2}$	131	1	1:56 $\frac{1}{2}$	1-30	4,700	
Aug. 21	Saratoga	Travers Stakes	1 $\frac{1}{4}$	129	1	2:01 $\frac{1}{2}$	2-9	9,275	
Sept. 4	Belmont Park	Lawrence Realization Stakes	1 $\frac{1}{2}$	126	1	2:40 $\frac{1}{2}$	1-100	15,040	
Sept. 11	Belmont Park	Jockey Club Stakes	1 $\frac{1}{2}$	118	1	2:28 $\frac{1}{2}$	1-100	5,850	
Sept. 18	Havre de Grace	Potomac Handicap	1 $\frac{1}{2}$	138	1	1:44 $\frac{1}{2}$	15-100	6,800	
Oct. 12	Kenilworth Park	Kenilworth Park Gold Cup	1 $\frac{1}{4}$	120	1	2:03	1-20	80,000	
Total								\$166,140	

RECAPITULATION

Year	Age	Sts.	1st	2d	3d	Unp.	Earnings
1919	2	10	9	1	0	0	\$ 83,325
1920	3	11	11	0	0	0	166,140
Totals		21	20	1	0	0	\$249,465

Assault, Stymlie, Among Money-winning Leaders

Robert J. Kleberg, Jr.'s Assault and Mrs. Ethel D. Jacobs' Stymlie made important strides in thoroughbred money-winning ranks in 1946 by capturing enough of the rich purses offered to advance threateningly on Whirlaway's all-time record of \$561,161. Assault, 3-year-old champion, became the first horse to earn more than \$400,000 in a single season, his triumph in the Westchester Handicap increasing his

1946 total to \$424,195. En route he smashed Gallant Fox's single season mark of \$306,275, made in 1930. Assault's all-time earnings now stand at \$441,445, placing him third on the list behind Whirlaway and Stymlie.

Stymlie's triumph in Jamaica's Gallant Fox Handicap netted \$41,200 and increased his earnings to \$516,285, enough to make him a close runner-up to Whirlaway.

"Triple Crown" Winners

men Assault won the Kentucky Derby, Preakness, and Belmont Stakes in 1946, he
me the seventh thoroughbred to join the select group which have captured the
e events for three-year-olds that make up the mythical "Triple Crown" in the United
ES.

England also has its "Triple Crown," consisting of the Epsom Derby, St. Leger Stakes,
Two Thousand Guineas. Fourteen horses have taken all three classics.
Following are the "Triple Crown" winners in both countries:

UNITED STATES

Horse	Owner	Year	Horse	Owner
Sir Barton	J. K. L. Ross	1941	Whirlaway	Warren Wright
War Admiral	Samuel D. Riddle	1943	Count Fleet	Mrs. John Hertz
Gallant Fox	William Woodward	1946	Assault	Robert J. Kleberg, Jr.
Omaha	William Woodward			

ENGLAND

West Australian	Mr. Bowes	1899	Flying Fox	Duke of Westminster
Gladiator	Count F. deLagrange	1900	Diamond Jubilee	Prince of Wales
Lord Lyon	R. Sutton	1903	Rock Sand	Sir J. Miller
Ormonde	Duke of Westminster	1915	Pommern	S. Joel
Common*	Sir F. Johnstone	1917	Gay Crusader	Mr. Fairie
Isinglass	H. McCalmont	1918	Gainsborough	Lady Jas. Douglas
Galtee More	J. Gubbins	1935	Bahram	Aga Khan

ced in name of Lord Alington in Two Thousand Guineas.

LEADING MONEY-WINNING THOROUGHBREDS

(Since 1930)

Horse	Age	Starts	1st	2d	3d	Amount won
Gallant Fox	3	10	9	1	0	\$308,275
Top Flight	2	7	7	0	0	219,000
Gusto	3	16	4	3	2	145,940
Singing Wood	2	9	3	2	2	88,050
Cavalcade	3	7	6	1	0	111,235
Omaha	3	9	6	1	2	142,255
Granville	3	11	7	3	0	110,295
Seabiscuit	4	15	11	2	2	168,580
Stagehand	3	15	8	2	3	189,710
Challedon	3	15	9	2	3	184,535
Bimelech	3	7	4	2	1	110,005
Whirlaway	3	20	13	5	2	272,386
Shut Out	3	12	8	2	0	238,872
Count Fleet	3	6	6	0	0	174,055
Pavot	2	8	8	0	0	179,040
Busher	3	13	10	2	1	273,735
Assault	3	15	8	2	3	424,195

New York Wagering, Attendance Records

Type of record	Track	Date	Amount
tuel handle (8 races)	Belmont	Sept. 22, 1945	\$5,016,745
tuel handle (7 races)	Jamaica	Nov. 3, 1945	4,330,471
(Empire City meeting)			
tuel handle (1 race)	Belmont	Sept. 27, 1945	763,127
ly double	Jamaica	Oct. 30, 1945	251,682
endance	Jamaica	May 30, 1945	64,670

Wagering on the 1946 Kentucky Derby at Churchill Downs reached \$1,202,474, the
gest on record for a single race. However, betting on the Derby starts as soon as the
es open. Santa Anita Park at Arcadia, Calif., attracted a crowd of 80,200 that bet
\$01,461 on Santa Anita Handicap day, March 9, 1946.

ev earned \$85,000, a record for a match
e, by defeating Papyrus in the Inter-
national Special at Belmont, Oct. 20, 1923.

Johnny Longden established a new all-
time money-winning record for jockeys
when his mounts earned \$981,977 in 1945.

LEADING MONEY-WINNING OWNERS (Since 1930)

Year	Name	Amount
1930	C. V. Whitney	\$385,972
1931	C. V. Whitney	422,923
1932	C. V. Whitney	403,681
1933	C. V. Whitney	241,292
1934	Brookmeade Stable (Mrs. Dodge Sloane)	251,138
1935	A. G. Vanderbilt	303,605
1936	Milky Way Farm Stable (Mrs. E. V. Mars)	206,450
1937	Mrs. Charles S. Howard	214,559
1938	H. Maxwell Howard	226,495
1939	Belair Stud (William Woodward)	284,250
1940	Charles S. Howard	334,120
1941	Calumet Farm (Warren Wright)	475,091
1942	Greentree Stable (Mrs. Payne Whitney)	414,432
1943	Calumet Farm (Warren Wright)	267,915
1944	Calumet Farm (Warren Wright)	601,660
1945	Maine Chance Farm (Mrs. E. N. Graham)	589,170
1946*	Calumet Farm (Warren Wright)	564,090

*Through Nov. 20.

LEADING JOCKEYS SINCE 1930 (Winners ridden)

Year	Jockey	Mounts	Win- ners	Un- placed	Pct.
1930	H. R. Riley	861	177	416	.21
1931	H. Roble	1,174	173	673	.15
1932	J. Gilbert	1,050	212	534	.20
1933	J. Westrope	1,224	301	522	.25
1934	M. Peters	1,045	221	498	.21
1935	C. Stevenson	1,099	206	578	.19
1936	B. James	1,106	245	505	.22
1937	J. Adams	1,265	260	642	.21
1938	J. Longden	1,150	236	575	.21
1939	D. Meade	1,284	255	628	.20
1940	E. Dew	1,377	287	709	.21
1941	D. Meade	1,164	210	611	.18
1942	J. Adams	1,120	245	540	.22
1943	J. Adams	1,069	228	511	.21
1944	T. Atkinson	1,539	287	808	.19
1945	J. D. Jessop	1,085	290	445	.27
1946*	T. Atkinson	1,377	233	758	.17

*Through Nov. 20.

Bernborough's Racing Career Ends

Bernborough, ranked as Australia's greatest race horse since Phar Lap, was forced into retirement after winning 15 races in succession in 1946 when he broke a sesamoid bone (a protuberant mass of cartilage in a tendon) of his near foreleg in the MacKinnon Stakes at Flemington. The MacKinnon was Bernborough's first race since the champion's winning streak was broken before a crowd of 107,000 in the Caulfield Stakes on Oct. 19. The 7-year-old, carrying 150 pounds, finished fifth in the mile-and-a-half Caulfield.

LEADING TRAINERS SINCE 1930 (Winners saddled)

Year	Name	Win- ners	Money won
1930	C. B. Irwin	92	\$ 70,411
1931	J. D. Mikel	72	49,776
1932	G. Alexandra	76	55,890
1933	H. Jacobs	116	76,965
1934	H. Jacobs	127	113,055
1935	H. Jacobs	114	95,155
1936	H. Jacobs	177	155,789
1937	H. Jacobs	134	142,474
1938	H. Jacobs	109	116,609
1939	H. Jacobs	106	100,907
1940	D. Womeldorf	108	112,137
1941	H. Jacobs	123	165,964
1942	H. Jacobs	133	186,371
1943	H. Jacobs	128	210,775
1944	H. Jacobs	117	306,821
1945	S. Lipiec	127	238,361
1946*	W. Molter	111	299,776

*Through Nov. 20.

Attendance, Betting Figures in U. S.

Year	Attendance	Parl-mutuel wagering
1940	8,500,000	\$ 408,528,711
1941	13,500,000	513,005,110
1942	11,500,000	534,062,392
1943	14,000,000	710,729,432
1944	18,000,000	1,126,564,595
1945	18,950,000	1,413,346,468
1946*	24,000,000	1,650,000,000

*Approximate estimate through Nov. 15.

FOREIGN STAKE WINNERS IN 1946

Abbreviations used—(E) English; (F) French

Epsom Derby (E)—J. E. Ferguson's Airborne
 Grand National (E)—Jock Morant's Lovely Cottage
 St. Leger (E)—J. E. Ferguson's Airborne
 2,000 Guineas (E)—Sir William Cooke's Happy Knight
 1,000 Guineas (E)—King George's Hy-pericum
 Ascot Gold Cup (E)—M. M. Boussac's Caracella II
 Cesarewitch (E)—H. B. Hankey's Monsieur L'Amiral
 Epsom Oaks (E)—Sir Alfred Butt's Steady Aim
 Grand Prix de Paris (F)—F. R. Schmitt's Souverain
 Prix de Diane (F)—Marcel le Baron's Pirette

TRA Organizes the TRPB

In January 1946 the Thoroughbred Racing Associations of the United States took steps to run down a minority element which threatened the sport of horse racing. It set up an investigating organization called the Thoroughbred Racing Protective Bureau and installed Spencer J. Drayton, former administrative assistant to Director J. Edgar Hoover of the FBI, as its head. It has been estimated that the TRPB will cost the race tracks comprising the TRA over half a million dollars annually.

Leading All-time Money-winning Thoroughbreds

This tabulation includes racing through Nov. 9, 1946.

Horse	Owner	Amount	Starts	1st	2d	3d
Flawless	Calumet Farm	\$561,161	60	32	15	9
Omaha	Mrs. Ethel D. Jacobs	516,285	96	24	24	22
Whirlaway	R. J. Kleberg, Jr.	441,445	24	10	4	4
Whirlaway	C. S. Howard	437,730	89	33	15	13
Whirlaway	Mrs. E. D. Mulrenan	392,145	94	22	24	20
Whirlaway	Calumet Farm	385,175	40	24	9	2
Whirlaway	W. S. Kilmer	376,744	74	33	12	10
Whirlaway	W. M. Jeffords	372,365	30	14	5	2
Whirlaway	Mrs. Albert Sabath	350,015	51	25	11	5
Whirlaway	H. P. and C. V. Whitney	338,610	51	29	10	4

1946 HORSE RACING CHAMPIONS

Best of the Year—Assault.
 Jockey Division—Assault.
 Year-Old Colt—Assault.
 Year-Old Filly—Bridal Flower.
 Year-Old Colt—Double Jay.
 Year-Old Filly—First Flight.
 Saddle-chaser—Elkridge.

Feller's Speed Measured at 98.6 m.p.h.

The question of how fast Bobby Feller throws a ball was settled before a night game between the Cleveland Indians and the Senators in Washington on Aug. 20. An Army measuring device caught one of Feller's pitches traveling at a speed of 145 feet per second, or 98.6 miles per hour, better than the previous record of 139 feet per second, or 94.7 miles per hour, set by Atley Aldrich, former New York Yankee pitcher. An Army testing machine measured the speed of the pitch, from the mound to the plate, to within 1/10,000 of a second.

Official American League Attendance Figures

Source: American League Service Bureau.

Club	1946 attendance	1945 attendance	Increase
*New York	2,265,512	881,845	1,383,667
Detroit	1,722,590	1,280,341	442,249
Boston	1,416,944	603,794	813,150
Cleveland	1,057,289	558,182	499,107
Washington	1,027,216	652,660	374,556
Chicago	983,403	657,981	325,422
Philadelphia	621,793	462,631	159,162
St. Louis	526,435	482,986	43,449

*New major league record.

The National League does not release attendance figures.

Stan Musial of the St. Louis Cardinals and Ted Williams of the Boston Red Sox climaxed banner regular-season performances in 1946 by being voted the most valuable players in their respective circuits in the annual poll conducted by the Baseball Writers' Association of America.

BRIDGE

Bridge championships are determined by tournaments conducted twice a year by the American Contract Bridge League, and called the "Summer Nationals" and the "Winter Nationals." In addition the annual Team-of-Four Tournament for the Harold S. Vanderbilt Trophy is generally considered by bridge players to be of championship stature.

There is some duplication between the summer and winter contests, but in general the summer tournaments, in which many of the events are limited to master class players, are considered the title tournaments.

The 1946 winners in each category follow:

Men's Pairs (summer)—Sidney Silodor and Charles J. Solomon, Philadelphia.

Women's Pairs (summer)—Waldemar von Redwitz and A. M. Barnes, New York.

Men's Pairs (summer)—Mrs. R. C. Young, Philadelphia, and Mrs. E. J. Seligman, New York.

Men's Team of Four (summer)—Wil-

liam Christian, Montgomery, Ala.; Mark Hodges, Dallas, Tex.; Sol Mogal, New York; Mrs. Wilkinson Wagar, Atlanta, Ga.

Individual Masters (invitation)—Robert McPherran, New York.

Harold S. Vanderbilt Trophy—Oswald Jacoby, Sam Stayman, Howard Schencken and George Rapee, New York.

The designation "master" is conferred by the bridge league in conformity with a master point plan. All tournaments, major or minor, conducted by the league carry with them master point awards, the number of master points being determined by the importance of the tournament. Winners, runners-up, and in important tournaments all who finish high in the standing, win points—an ordinary tournament confers five points to the winners. A player who has amassed from one to nine points is called a junior master; 10 to 29 a master (and can play in all master events except the pair tournament); 30 to 49 a national master (and can play in all events); 50 to 299 a senior master; 300 and over a life master.

HARNESS RACING

OLIVER WENDELL HOLMES, the famous Autocrat of the Breakfast Table, wrote that the running horse was a gambling toy but the trotting horse was useful and, furthermore, "horse-racing is not a republican institution; horse-trotting is." Oliver Wendell Holmes was a born and bred New Englander and New England was the nursery of the harness racing sport in America. Pacers and trotters were matters of local pride and prejudice in Colonial New England and, shortly after the Revolution, the Messenger and Justin Morgan strains produced many winners in harness racing "matches" along the turnpikes of New York, Connecticut, Rhode Island, Massachusetts, Vermont and New Hampshire.

There was English thoroughbred blood in Messenger and Justin Morgan and, many years later, it was blended in Rysdyk's

Hambletonian, foaled in 1849. Hambletonian was not particularly fast under harness but his descendants have had almost a monopoly of prizes, titles and records in the harness racing game. Hambletonian was purchased as a foal with its dam for a total of \$124 by William Rysdyk of Goshen, N. Y. and made a modest fortune for the purchaser.

Trotters and pacers often were raced under saddle in the old days and, in fact, the custom still survives in some places in Europe. Dexter, the great trotter that lowered the mile record from 2:19 $\frac{3}{4}$ to 2:17 $\frac{1}{4}$ in 1867, was said to handle just as well under saddle as when pulling a sulky. But as sulkies were lightened in weight and improved in design, trotting under saddle became less common and finally faded out in this country.

Harness Racing Statistics

Source: Roger Duncan, Vice-President, United States Trotting Association.

Hambletonian Winners GOSHEN, N. Y.

(Three-year-old trotters)

Year	Winner	Driver	Best time	Value
1926	Guy McKinney	Nat Ray	2.04 3/4	\$73,451.32
1927	Iosola's Worthy	Marvin Childs	2.03 3/4	54,694.44
1928	Spencer	W. H. Leese	2.02 1/2	66,226.25
1929	Walter Dear	W. R. Cox	2.02 3/4	55,484.75
1930	Hanover's Bertha	Tom Berry	2.03	56,859.84
1931	Calumet Butler	R. McMahon	2.03 1/4	50,921.39
1932	The Marchioness	W. Caton	2.01 1/4	53,339.26
1933	Mary Reynolds	Ben White	2.03 3/4	40,459.88
1934	Lord Jim	H. M. Parshall	2.02 3/4	25,845.44
1935	Greyhound	Sep Palin	2.02 1/4	33,321.00
1936	Rosalind	Ben White	2.01 3/4	35,643.23
1937	Shirley Hanover	H. Thomas	2.01 1/2	37,912.58
1938	McLin Hanover	H. Thomas	2.02 1/4	37,962.37
1939	Peter Astra	H. M. Parshall	2.04 1/4	40,502.46
1940	Spencer Scott	F. Egan	2.02	43,685.45
1941	Bill Gallon	Lee Smith	2.05	38,729.86
1942	The Ambassador	Ben White	2.04	38,729.86
1943	Volo Song	Ben White	2.02 1/2	42,298.03
1944	Yankee Maid	H. Thomas	2.04	34,427.12
1945	Titan Hanover	H. Pownall	2.04	50,196.96
1946	Chestertown	Tom Berry	2.02 1/2	51,845.57

Run at Syracuse, N. Y., in 1926 and 1928; run at Lexington, Ky., in 1927 and 1929; run at Empire City Race Track, Yonkers, N. Y., in 1943.

Trotting, Pacing Records Made at Santa Anita Meeting

Three world harness racing records were made within two weeks during the 1946 Grand Circuit meeting at Santa Anita Park, Arcadia, Calif. The first mark went to War Glory, which lowered the mile-and-a-quarter trotting record to 2:35. Five days later, May 11, Kaola shattered this record

by three seconds in winning the \$50,000 Western Harness Grand Trot. On May 18, Blue Again won the \$50,000 Western Harness Grand Pace, another mile-and-a-quarter race, in 2:32 $\frac{1}{2}$, a full second under the previous mark. Blue Again is by Scotland and Kaola is by Volomite.

WORLD HARNESS RACING RECORDS

This compilation recognizes as champions those horses which have made the fastest time at their gait, age, and hitch, either against time or in a race at one mile.)

Trotting on Mile Track

	Time	Driver	Date	Where made
Greyhound.....	1.55½	S. F. Palin.....	Sept. 29, 1938	Lexington, Ky.
g—Airdale.....	2.15¾	H. C. Moody.....	Oct. 2, 1912	Lexington, Ky.
old—Titan Hanover.....	2.00	Harry Pownall.....	Oct. 4, 1944	Lexington, Ky.
old—Titan Hanover.....	1.58	Harry Pownall.....	Sept. 7, 1945	DuQuoin, Ill.
old—Spencer Scott.....	1.57¼	Fred Egan.....	Sept. 24, 1941	Lexington, Ky.
old—Greyhound.....	1.57¼ (r)	S. F. Palin.....	Aug. 21, 1936	Springfield, Ill.
river—Dean Hanover.....	1.58½	Alma Sheppard.....	Sept. 24, 1937	Lexington, Ky.
gon—Uhlán.....	2.00	C. K. G. Billings.....	Aug. 7, 1911	North Randall, Ohio
gon—Lou Dillon.....	2.00	C. K. G. Billings.....	Aug. 24, 1903	Readville, Mass.
to Pole—Greyhound and Rosalind.....	1.58¾	S. F. Palin.....	Sept. 5, 1939	Indianapolis, Ind
Three Abreast—Calumet Dubuque, Mac rey, Hollyrood Boris.....	2.10¼	T. F. Walsh.....	Aug. 14, 1937	Goshen, N. Y.
Tandem—John R. McElwyn and Hollyrood ier.....	2.19¼	T. F. Walsh.....	Sept. 7, 1936	Rutland, Vt.
n-Hand—Damiana, Belnut, Maud V., spra.....	2.30	Not recorded.....	July 4, 1896	Chicago, Ill.
Saddle—Greyhound.....	2.01¾	Mrs. F. D. Johnson.....	Sept. 27, 1940	Lexington, Ky.
Running Mate—Uhlán.....	1.54½	Chas. Tanner.....	Oct. 9, 1913	Lexington, Ky.

Record made in race.

Trotting on Half-mile Track

	Time	Driver	Date	Where made
ce—Greyhound.....	1.59¾	S. F. Palin.....	July 16, 1937	Goshen, N. Y.
ng—U. Forbes.....	2.21½	H. C. Moody.....	Sept. 18, 1913	Louisville, Ky.
r-old—Titan Hanover.....	2.03½ (r)	Harry Pownall.....	Sept. 19, 1944	Delaware, Ohio
r-old—Titan Hanover.....	2.01¾	Harry Pownall.....	Sept. 18, 1945	Delaware, Ohio
r-old—Greyhound.....	2.02	S. F. Palin.....	Sept. 25, 1936	Allentown, Pa.
agon—Sweet Marie.....	2.08¾	W. J. Andrews.....	Sept. 21, 1907	Allentown, Pa.
to Pole—Calumet Dubuque and Hollyrood ris.....	2.06¾	T. F. Walsh.....	Aug. 19, 1937	Skowhegan, Me.
r Saddle—Hollyrood Boris.....	2.09	Helen James.....	Sept. 17, 1936	Brockton, Mass.

Record made in race.

Pacing on Mile Track

	Time	Driver	Date	Where made
ge—Billy Direct.....	1.55	Vic Fleming.....	Sept. 28, 1938	Lexington, Ky.
ing—Royal Lady.....	2.14¾	O. M. Powell.....	Oct. 20, 1939	Indianapolis, Ind.
ear-old—Jimmy Creed.....	2.00½ (r)	Homer Walton.....	Oct. 4, 1944	Lexington, Ky.
ear-old—Chief Counsel.....	1.57¾	H. M. Parshall.....	Sept. 30, 1938	Lexington, Ky.
ear-old—Billy Direct.....	1.55	Vic Fleming.....	Sept. 28, 1938	Lexington, Ky.
Driver—Highland Scott.....	1.59¼	Mrs. E. R. Harriman.....	Aug. 22, 1929	Goshen, N. Y.
Wagon—Dan Patch.....	1.57¼ (w)	M. E. McHenry.....	Oct. 27, 1903	Memphis, Tenn.
n to Pole—Minor Heir and George Gano.....	2.02	E. J. McCarr.....	Oct. 1, 1912	Columbus, Ohio
er Saddle—George Gano.....	2.10¾	M. Anderson.....	Sept. 2, 1915	Madison, Wis.
Running Mate—Flying Jib.....	1.58¼	A. McDowell.....	Oct. 4, 1894	Chillicothe, Ohio

(r)Record made in race. (w)With windshield.

Pacing on Half-mile Track

	Time	Driver	Date	Where made
ge—Billy Direct.....	1.59¾	Wm. Fleming.....	Oct. 18, 1939	Altamont, N. Y.
ring—Lady Patch.....	2.18¾	O. M. Powell.....	*	*
ear-old—Adios.....	2.03¾ (r)	R. L. Parker.....	Sept. 16, 1942	Carthage, Ohio
ear-old—Mc I Win.....	2.01¼ (r)	H. M. Parshall.....	Oct. 13, 1932	Raleigh, N. C.
ear-old—King's Counsel.....	2.01 (r)	H. Fitzpatrick.....	Aug. 18, 1944	Jefferson, Ohio
Wagon—Joe Patchen.....	2.11 (r)	J. C. Curry.....	*	*
m to Pole—Billy Direct and The Widower.....	2.04¼	Chas. Fleming.....	Oct. 12, 1939	Altamont, N. Y.
er Saddle—Zombro Hanover.....	2.06¾	J. Weipert.....	Sept. 21, 1935	Newark, N. J.

Data unavailable.

(r)Record made in race.

Stake Winners in 1946

Stake and winner	Best time
Santa Anita Derby (10-class trot, conditioned, 1¼ miles)—Kaola ..	2.32
Western Harness Grand Pace (9-class pace, conditioned, 1¼ miles)—Blue Again ..	2.32½
*Coaching Club Trotting Oaks (fillies)—Onolee Hanover ..	2.08¼
*American Trotting Championship (invitational)—Doctor Spencer ..	2.03
*National Pacing Derby (invitational)—April Star ..	2.03¾

THREE-YEAR-OLD TROTTERS

Hambletonian—Chestertown ..	2.02½
*Championship Stallion — Onolee Hanover ..	2.08¼
Horseman Futurity—Victory Song ..	2.01¾
*Reading Fair Futurity—Eben Scott ..	2.11½
Kentucky Futurity—Victory Song ..	2.00½
Matron—Chestertown ..	2.04½
American—Victory Song ..	2.03¾

THREE-YEAR-OLD PACERS

Stake and winner	Best time
*Village Farm (1st div.)—Ensign Hanover ..	2.06
*Village Farm (2d div.)—Direct Express ..	2.06½
Geers—Direct Express ..	2.02
*Little Brown Jug—Ensign Hanover ..	2.02¾
Matron—Ensign Hanover ..	2.03¼
American—Ensign Hanover ..	2.06

TWO-YEAR-OLD TROTTERS

Greyhound—Way Yonder ..	2.06
American—Hoot Mon ..	2.07

TWO-YEAR-OLD PACERS

*Village Farm (1st div.)—Mr. Herbert ..	2.08
*Village Farm (2d div.)—Goose Bay ..	2.08
Geers—Goose Bay ..	2.05¼
Fox Pacing—Poplar Byrd ..	2.02
Little Pat—Poplar Byrd ..	2.04¾
American—Goose Bay ..	2.03

*Raced on half-mile track.

ICE SKATING

Speed

Source: Art Goodfellow, Editor, *National Ice Skating Guide*, 104 Front Street, New York 5, N. Y.

NATIONAL SENIOR AMATEUR RECORDS

(Made in competition)

MEN'S OUTDOOR

Distance	Time	Holder	Place	Date
220 yd.	18.1	Robert Fitzgerald	Minneapolis	1/10/43
	35.4	Charles Gorman	Lake Placid	2/14/27
440 yd.	35.4	Ken Bartholomew	St. Paul	1/25/42
	35.4	Robert Fitzgerald	Minneapolis	2/15/42
880 yd.	1:15.2	Clas Thunberg	Lake Placid	2/13/26
¾ mi.	1:55.2	Clas Thunberg	Saranac Lake	2/15/26
1 mi.	2:38.2	Clas Thunberg	Lake Placid	2/12/26
2 mi.	5:33.8	Eddie Schroeder	Minneapolis	2/20/34
3 mi.	8:19.6	Ross Robinson	Lake Placid	2/14/30
5 mi.	14:30.4	Ross Robinson	Lake Placid	2/12/37

MEN'S INDOOR

Distance	Time	Holder	Place	Date
220 yd.	18	F. Robson	Boston	1/13 11
¾ mi.	23.8	C. Gorman	St. John's	3/1/27
440 yd.	36.8	C. Gorman	St. John's	2/27 25
880 yd.	1:15.6	B. O'Sickey	Pittsburgh	3/1/16
¾ mi.	2:00.4	P. Johnston	Cleveland	3/2/28
1 mi.	2:41.2	Morris Wood-		
		F. Robson	Pittsburgh	2/13/04
2 mi.	5:54.8	R. Heckenbach	St. Paul	1/30/37
3 mi.	8:58.8	P. Johnston	Pittsburgh	2/19/27
4 mi.	13:41.8	Joe Moore	Brooklyn	2/7 27
5 mi.	15:42.2	F. Stack	Chicago	2/8/30

WOMEN'S OUTDOOR

Distance	Time	Holder	Place	Date
220 yd.	20.2	Maddy Horn	Saranac Lake	2/11/39
440 yd.	39.4	L. Neitzel	Minneapolis	2/3/29
880 yd.	1:25.9	Maddy Horn	Escanaba	1/13/40
¾ mi.	2:17	Dot Franey	Minneapolis	1/16/37
1 mi.	3:06.1	Maddy Horn	Minneapolis	1/24/37

WOMEN'S INDOOR

Distance	Time	Holder	Place	Date
220 yd.	21.6	Dot Franey	St. Paul	2/15 36
440 yd.	41.6	Dot Franey	St. Paul	2/16/36
880 yd.	1:27	Leila B. Potter	Pittsburgh	3/6 26
¾ mi.	2:18.1	Kit Klein	Chicago	2/2 35
1 mi.	3:15.6	Maddy Horn	Chicago	4/1/38

The North American speed skating championships, held at Schenectady, N. Y., last year, were won by Bob Fitzgerald of Minneapolis and Miss Eileen Whalley of

Winnipeg. Fitzgerald, in amassing a winning score of 140 points, captured the 220, 440, 880-yard and three-quarter mile events and finished second in the two-mile.

Figure

WORLD CHAMPIONS

Year	Men	Women
1916	Gilbert Fuchs, Germany	
1917	Gustav Hugel, Austria	
1918	H. Grenander, Sweden	
1919	Gustav Hugel, Austria	
1920	Gustav Hugel, Austria	
1921	Ulrich Salchow, Sweden	
1922	Ulrich Salchow, Sweden	
1923	Ulrich Salchow, Sweden	
1924	Ulrich Salchow, Sweden	
1925	Ulrich Salchow, Sweden	
1926	Gilbert Fuchs, Germany	Madge Syers, England
1927	Ulrich Salchow, Sweden	Madge Syers, England
1928	Ulrich Salchow, Sweden	Lily Kronberger, Hungary
1929	Ulrich Salchow, Sweden	Lily Kronberger, Hungary
1930	Ulrich Salchow, Sweden	Lily Kronberger, Hungary
1931	Ulrich Salchow, Sweden	Lily Kronberger, Hungary
1932	Fritz Kachler, Austria	Meray Horvath, Hungary
1933	Fritz Kachler, Austria	Meray Horvath, Hungary
1934	Gosta Sandahl, Sweden	Meray Horvath, Hungary
1935-21	No competition	No competition
1922	Gillis Grafstrom, Sweden	Mrs. Szabo Plank, Austria
1923	Fritz Kachler, Austria	Mrs. Szabo Plank, Austria
1924	Gillis Grafstrom, Sweden	Mrs. Szabo Plank, Austria
1925	Willi Boeckl, Austria	Mrs. Szabo Plank, Austria
1926	Willi Boeckl, Austria	Mrs. Szabo Plank, Austria
1927	Willi Boeckl, Austria	Sonja Henie, Norway
1928	Willi Boeckl, Austria	Sonja Henie, Norway
1929	Gillis Grafstrom, Sweden	Sonja Henie, Norway
1930	Karl Schafer, Austria	Sonja Henie, Norway
1931	Karl Schafer, Austria	Sonja Henie, Norway
1932	Karl Schafer, Austria	Sonja Henie, Norway
1933	Karl Schafer, Austria	Sonja Henie, Norway
1934	Karl Schafer, Austria	Sonja Henie, Norway
1935	Karl Schafer, Austria	Sonja Henie, Norway
1936	Karl Schafer, Austria	Sonja Henie, Norway
1937	Felix Kaspar, Austria	Cecilia Colledge, England
1938	Felix Kaspar, Austria	Megan Taylor, England
1939	Graham Sharp, England	Megan Taylor, England
1940-1946	No competition	No competition

Patty Berg defeated Betty Jameson in the final of the first women's national open championship, held at Spokane, Wash., last year. The \$5600 purse was the richest ever offered in women's golf.

THE GAME OF CURLING is supposed to be of Dutch origin but it dates back to 1607 in Scotland and grew to be the national sport of that country. The action is something like bowling on ice and, for that matter, it is alleged to be an offshoot of lawn bowling. Circular stones (weight about 35 pounds in the United States, top limit 44 pounds in Great Britain) are sent sliding up and down the rinks toward targets called "tees" at either end. Each player uses two stones and a side or team consists of four players, one of whom is captain or "skip".

Formal competition in curling began

UNITED STATES CHAMPIONS

Year	Men	Women
1914	Norman Scott	Theresa Weld
1915-17	No competition	No competition
1918	Nathaniel Niles	Mrs. R. S. Beresford
1919	No competition	No competition
1920	Sherwin Badger	Theresa Weld
1921	Sherwin Badger	Theresa Blanchard
1922	Sherwin Badger	Theresa Blanchard
1923	Sherwin Badger	Theresa Blanchard
1924	Sherwin Badger	Theresa Blanchard
1925	Nathaniel Niles	Beatrix Loughran
1926	C. I. Christenson	Beatrix Loughran
1927	Nathaniel Niles	Beatrix Loughran
1928	Roger Turner	Maribel Y. Vinson
1929	Roger Turner	Maribel Y. Vinson
1930	Roger Turner	Maribel Y. Vinson
1931	Roger Turner	Maribel Y. Vinson
1932	Roger Turner	Maribel Y. Vinson
1933	Roger Turner	Maribel Y. Vinson
1934	Roger Turner	Suzanne Davis
1935	Robin Lee	Maribel Y. Vinson
1936	Robin Lee	Maribel Y. Vinson
1937	Robin Lee	Maribel Y. Vinson
1938	Robin Lee	Joan Tozzer
1939	Robin Lee	Joan Tozzer
1940	Eugene Turner	Joan Tozzer
1941	Eugene Turner	Jane Vaughn
1942	Bobby Specht	Jane V. Sullivan
1943	Arthur R. Vaughn, Jr.	Gretchen Merrill
1944	Omitted	Gretchen Merrill
1945	Omitted	Gretchen Merrill
1946	Richard Button	Gretchen Merrill

Attempts to Swim Channel Fail

In 1946 two attempts were made to swim the English Channel. The first, by Jorge Berroeta of Chile, came within a half mile of being successful. Berroeta was in the water for more than twenty hours before surrendering off the beach of Dover. Miss Elna Anderson of Denmark gave up after three hours and one minute. Georges Michel of Paris holds the record of eleven hours and five minutes, set in 1926. He swam from Cape Gris Nez, France, to St. Margaret's Bay, Dover.

with the formation of the Grand Caledonian Curling Club in Scotland on Nov. 15, 1838. The title of the club was changed to "Royal" Caledonian Curling Club when Queen Victoria, with Albert, the Prince Consort, visited Scotland in 1842 and Prince Albert became a patron of the club. Scots who emigrated to Canada and the United States carried their love of the game with them and spread the enthusiasm to such an extent that, where climate permits, curling matches and "bonspiels" have become popular fixtures on the winter sports programs of the northern States and Canada.

BASKETBALL

BASKETBALL may be unique in sports. It is one game concerning which it is safe to state when, where and how it originated. In the winter of 1891-92, Dr. James Naismith, an instructor in the Y.M.C.A. Training College (now Springfield College) at Springfield, Mass., deliberately invented the game of basketball in order to provide indoor exercise and competition for the students between the closing of the football season and the opening of the baseball season. He affixed peach baskets overhead on the walls at opposite ends of the gymnasium and, with an association (soccer) football, organized teams to play his new game in which the purpose was to toss the ball into one basket and prevent, as far as possible, the opponents from tossing the ball into the other basket. Fun-

damentally, the game is the same today, though there have been some improvements in equipment and many changes in the rules.

Because Dr. Naismith had eighteen available players when he invented the game, the first rule was: "There shall be nine players on each side." Later the number of players became optional, depending upon the size of the available court, but the five-player standard was adopted when the game spread over the country. United States soldiers introduced the game in Europe in World War I and, being taken up by foreign nations, it soon became a world-wide sport. An odd point is that, though it is still chiefly an indoor game in the United States, in other countries it flourishes almost entirely outdoors.

Basketball Statistics

Intercollegiate

FINAL 1945-46 CONFERENCE STANDINGS

Southern Conference

	Won	Lost	Points For	Points Agst.
North Carolina.....	13	1	794	517
*Duke.....	12	2	689	482
Virginia.....	7	3	482	364
Wake Forest.....	8	5	545	546
Furman.....	6	4	447	427
Maryland.....	5	4	350	368
William and Mary.....	5	5	449	425
George Washington.....	4	5	415	389
North Carolina State.....	5	7	466	561
Clemson.....	5	7	547	543
South Carolina.....	4	7	486	519
Davidson.....	5	11	629	729
Richmond.....	3	7	352	366
V. M. I.....	1	6	189	332
Citadel.....	1	6	248	398
Washington and Lee.....	0	4	130	227

*Won title in championship tournament.

Southeastern Conference

Louisiana State.....	8	0	439	256
*Kentucky.....	6	0	349	203
Tennessee.....	8	3	499	395
Alabama.....	8	4	476	470
Auburn.....	7	6	530	553
Georgia Tech.....	7	7	614	636
Georgia.....	6	6	511	430
Tulane.....	4	5	458	431
Vanderbilt.....	2	5	255	343
Florida.....	2	6	391	417
Mississippi.....	2	8	389	503
Mississippi State.....	3	12	582	717

*Won title in championship tournament.

Big Ten

	Won	Lost	Points For	Points Agst.
Ohio State.....	10	2	590	510
Indiana.....	9	3	641	551
Northwestern.....	8	4	628	574
Iowa.....	8	4	606	550
Illinois.....	7	5	627	499
Minnesota.....	6	5	594	584
Michigan.....	6	6	661	584
Purdue.....	4	8	586	598
Wisconsin.....	1	10	519	611
Chicago.....	0	12	377	768

Pacific Coast Conference

SOUTHERN DIVISION

*California.....	13	2	691	529
U. S. C.....	8	4	557	509
U. C. L. A.....	5	7	453	457
Stanford.....	0	12	382	559

NORTHERN DIVISION

Idaho.....	12	7	822	842
Oregon State.....	10	6	779	697
Oregon.....	8	8	841	878
Washington.....	6	10	760	789
Washington State.....	5	11	751	802
Montana.....	1	1	104	110

*Won title play-off.

Intercollegiate Conference Standings—(cont.)

Southwest

	Won	Lost	Points	
			For	Agst.
lor.....	11	1	576	477
ansas.....	9	3	723	546
ansas.....	7	5	615	617
as Christian.....	6	6	557	592
as.....	5	7	542	604
as A & M.....	4	8	562	589
Methodist.....	0	12	529	679

Missouri Valley

	Won	Lost	Points	
			For	Agst.
Oklahoma A & M.....	12	0	648	341
Wichita.....	6	4	422	421
St. Louis.....	6	5	500	464
Drake.....	5	7	499	575
Washington.....	3	6	347	449
Creighton.....	4	8	355	455
Tulsa.....	3	9	452	518

Big Six

ansas.....	10	0	557	399
ahoma.....	7	3	521	439
wa State.....	5	5	502	461
braska.....	3	7	428	535
ssouri.....	3	7	391	437
ansas State.....	2	8	408	536

Eastern Intercollegiate League

Dartmouth.....	7	1	376	317
Cornell.....	6	2	486	357
Pennsylvania.....	4	4	403	376
Columbia.....	3	5	334	419
Princeton.....	0	8	311	441

Big Seven

oming.....	10	2	634	541
orado.....	9	3	644	529
ah.....	8	4	592	498
orado A & M.....	6	6	510	534
igham Young.....	6	6	547	560
ah State.....	2	10	488	583
ver.....	1	11	482	652

National Collegiate A. A. Champions

1939—Oregon	1943—Wyoming
1940—Indiana	1944—Utah
1941—Wisconsin	1945—Oklahoma A & M
1942—Stanford	1946—Oklahoma A & M

Professional

WORLD CHAMPIONS

1939 New York Renaissance	1943 Washington, D. C.
1940 Harlem Globetrotters	1944 Ft. Wayne (Ind.) Zollners
1941 Detroit Eagles	1945 Ft. Wayne (Ind.) Zollners
1942 Oshkosh Stars	1946 Ft. Wayne (Ind.) Zollners

NATIONAL BASKETBALL LEAGUE

Source: Keith Brehm, National Basketball League.

Final 1945-46 Standing of the Teams

(Regular season play)

Champions

Western Division				Eastern Division			
Won Lost Pct.				Won Lost Pct.			
heboygan....	21	13	.618	Fort Wayne.	26	8	.765
shkosh.....	19	15	.559	Rochester*.	24	10	.706
hicago.....	17	17	.500	Youngstown	13	20	.394
ndianapolis..	10	22	.313	Cleveland..	4	29	.121

1938 Oshkosh	1943 Fort Wayne
1939 Akron	1944 Fort Wayne
1940 Akron	1945 Fort Wayne
1941 Oshkosh	1946 Rochester
1942 Oshkosh	

*Won title in play-offs.

AMERICAN BASKETBALL LEAGUE

Source: John J. O'Brien, President, American Basketball League

FINAL 1945-46 STANDING OF THE TEAMS

(Regular season)

	Won	Lost	Pct.		Won	Lost	Pct.
Baltimore Bullets.....	21	13	.618	Wilmington Bombers.....	15	19	.441
Philadelphia Sphas.....	21	13	.618	Trenton Tigers.....	14	20	.412
New York Gothams.....	18	16	.529	Paterson Crescents.....	13	21	.382

*Baltimore defeated Philadelphia in play-off game for first place..

Final play-off series

Baltimore Bullets.....	3	1	.750	Philadelphia Sphas.....	1	3	.250
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American League Champions

1926—Cleveland Rosenblums
 1927—Brooklyn Original Celtics
 1928—Brooklyn Original Celtics
 1929—Cleveland Rosenblums
 1930—Cleveland Rosenblums
 1931—Brooklyn Visitations
 1932—No competition
 1933—No competition
 1934—Philadelphia Hebrews
 1935—Brooklyn Visitations
 1936—Philadelphia Hebrews

1937—Philadelphia Hebrews
 1938—Jersey Reds
 1939—New York Jewels
 1940—Philadelphia Sphas
 1941—Philadelphia Sphas
 1942—Wilmington
 1943—Trenton
 1944—Wilmington Bombers
 1945—Philadelphia Sphas
 1946—Baltimore Bullets

Addresses of Game and Fish Law Bureaus

Source: Sports Afield, 401-05 Second Ave. So., Minneapolis 1, Minn.

A letter to any conservation department listed below will bring a copy of the hunting laws or of the fishing laws that are current at the time of request:

<p>Alabama: Dept. of Conservation, Montgomery 4. Alaska: Fish and Wildlife Service, Juneau. Arizona: State Game Warden, Phoenix. Arkansas: Game and Fish Comm., Little Rock. California: Div. of Fish and Game, San Francisco 11. Colorado: Dept. of Game and Fish, Denver 11. Connecticut: Supt. of Fisheries and Game, Hartford. Delaware: Chief Game and Fish Warden, Dover. District of Columbia: Supt. of Metropolitan Police, Washington. Florida: Director, Game and Fresh Water Fish Comm., Tallahassee. Georgia: Director, Div. of Wildlife, Atlanta. Idaho: Dept. of Fish and Game, Boise. Illinois: Dept. of Conservation, Springfield. Indiana: Dept. of Conservation, Indianapolis 9. Iowa: State Conservation Comm., Des Moines 8. Kansas: Director of Fish and Game Comm., Pratt. Kentucky: Director, Game and Fish Div., Frankfort. Louisiana: Comm'r. of Conservation, New Orleans 16. Maine: Comm'r. of Inland Fisheries and Game, State House, Augusta. Maryland: State Game Warden, 514 Munsey Bldg., Baltimore 2. Massachusetts: Director, Div. of Fisheries and Game, 15 Ashburton Place, Boston. Michigan: Director, Dept. of Conservation, Lansing. Minnesota: Director, Div. of Game and Fish, Dept. of Conservation, St. Paul 1. Mississippi: Director of Conservation, Jackson. Missouri: Conservation Comm., Jefferson City. Montana: State Fish and Game Warden, Helena 3.</p>	<p>Nebraska: Sec., Game, Forestration and Parks Comm., Lincoln 9. Nevada: Sec., State Fish and Game Comm., Reno. New Hampshire: Fish and Game Dept., Concord. New Jersey: Sec., Board of Fish and Game Comm'rs., Trenton. New Mexico: State Game Warden, Santa Fe. New York: Dept. of Conservation, 488 Broadway, Albany 7. North Carolina: Div. of Game and Inland Fisheries, Raleigh. North Dakota: Game and Fish Comm'r., Bismark. Ohio: Conservation Comm'r., Dept. of Agriculture, Columbus 15. Oklahoma: State Game and Fish Comm., Oklahoma City 5. Oregon: State Game Comm., 616 Oregon Bldg., Portland. Pennsylvania: Board of Fish Comm'rs., Harrisburg. Rhode Island: Div., of Fish and Game, State House, Providence. South Carolina: Chief Game Warden, Columbia. South Dakota: Director, Game and Fish Comm., Pierre. Tennessee: State Director of Game and Fish, 304 State Office Bldg., Nashville 3. Texas: Game, Fish, and Oyster Comm., Austin 14. Utah: Director, Utah Fish and Game Comm., State Capitol Bldg., Salt Lake City. Vermont: Fish and Game Director, Montpelier. Virginia: Exec. Sec., Comm. of Game and Inland Fisheries, Richmond. Washington: Dept. of Game, 515 Smith Tower, Seattle 4. West Virginia: Conservation Comm., Charleston. Wisconsin: Conservation Director, Madison 2. Wyoming: State Game and Fish Comm., Cheyenne. Canada: Canadian Travel Bureau, Ottawa.</p>
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FISHING

WORLD RECORDS

Caught with Rod and Reel in Salt Water

Source: International Game Fish Association, Francesca LaMonte, Secretary, American Museum of Natural History.

Species	Lb., oz.	Length	Girth	Where caught	Year	Angler
Core	66—4	....	....	Catalina, California	1912	Frank Kelly
Merjack	106	68½"	37"	Pass-a-Grille, Florida	1937	Harvey M. Harker
Cuda	103—4	66"	31¼"	Bahama Islands	1932	Chester E. Benet
Calif. Black Sea	515	....	....	Catalina, California	1916	Wallace Beery
Calif. White Sea	74—4	76"	30"	Playa del Rey, California	1941	W. M. Hartness
Channel	75—8	64¾"	41"	Cape Hatteras, N. C.	1941	Capt. B. R. Ballance
Sea	8—2	....	....	Banks off New York	....	Peter Volkman
Striped	73	60"	30½"	Vineyard Sound, Mass.	1913	Chas. B. Church
fish (Tautog)	21—2	30"	21¼"	Sheepshead Bay, N. Y.	1937	Albert von Kleist
fish	25	....	....	Cohasset Narrows, Mass.	1874	L. Hathaway
fish	13—12	31"	17"	Bimini, Bahamas	1919	B. F. Peek
(Fla. Kingfish)	73—8	62"	32"	Bimini, Bahamas	1935	Leonard B. Harrison
ca	102	....	....	Cape Charles, Va.	1938	J. E. Stansbury
hin	67—8	68½"	37½"	Oahu, Hawaii	1940	Fred McNamara
n, Black	90	....	....	Surf City, New Jersey	1925	Capt. Jack Inman
nder, Summer	19	....	....	Banks off New York	1895	Fred Foster
ish	542	....	....	Sarasota, Florida	1923	W. E. Lincoln
in, Blue	737	157½"	72"	Bimini, Bahamas	1941	J. V. Martin
in, Pacific Black	976	152½"	74"	Bay of Islands, N. Z.	1926	Capt. Laurie Mitchell
in, Silver	618	138"	62"	Tahiti	1930	Zane Grey
in, Striped	692	161"	....	Balboa, California	1931	A. Hamann
in, White	161	104"	33"	Miami, Florida	1938	L. F. Hooper
alo (Snook)	50—8	55"	....	Chagres River, Canal Zone	1944	Capt. J. W. Anderson
ish, Atlantic	106	....	....	Miami Beach, Florida	1929	Wm. Bonnell
ish, Pacific	190	122½"	39"	Charles Islands, Galapagos	1938	E. Tremayne
ish	736	175"	....	Galveston, Texas	1938	Gus Pangarakis
rk, Mako	1000	144"	....	Mayor Island, N. Z.	1943	B. D. H. Ross
rk, Porbeagle	1009	126"	72"	Egmont Key, Florida	1936	Al. Hack
rk, Thresher	922	....	....	Bay of Islands, N. Z.	1937	W. W. Dowding
rk, Tiger	1382	166"	93"	Sydney Heads, Australia	1939	Lyle Bagnard
rk, White	1919	176"	96½"	Kangaroo Island, Australia	1941	G. R. Cowell
rdfish, Broadbill	860	165"	70"	Tocopilla, Chile	1940	W. E. S. Tucker
oon	247	89½"	....	Panuco River, Mexico	1938	H. W. Sedgwick
ea, Allison	265	73"	53"	Makua, Hawaii	1937	J. W. Harvey
ea, Bluefin	927	123"	80"	Ipswich Bay, Mass.	1940	J. Vernaglia
ea, Dogtoothed	151—8	....	....	Tahiti	1936	Dr. S. Rabinovitch
oo	133—8	83"	31"	Greer Cay, Bahamas	1943	K. L. Ames, Jr.
nkfish	17—8	46"	19"	Mullica River, N. J.	1944	A. Weisbecker, Jr.
nkfish, Spotted	14	33½"	18"	Lake Worth, Florida	1946	R. N. Rose
owtail	88	64"	31"	Bermagui, Australia	1938	Clive Firth

Caught with Rod and Reel in Fresh Water

Source: Field & Stream, 515 Madison Avenue, New York 22, N. Y.

Species	Lb., oz.	Length	Girth	Where caught	Year	Angler
ck Bass, Largemouth	22—4	32½"	28½"	Montgomery Lake, Ga.	1932	George W. Perry
ck Bass, Smallmouth	14	28"	21¼"	Oakland, Florida	1932	Walter Harden
p	42	42"	29"	Rappahannock River, Va.	1930	Robert W. Harris
fish, Channel	28	38¾"	22"	Ohio River	1924	C. L. Stanley
skafalongo	62—8	56½"	29¼"	Lake St. Clair, Mich.	1940	Percy P. Haver
che, Yellow	4—3½	....	....	Bordentown, New Jersey	1865	Dr. C. C. Abbot
re, Northern	46—2	52½"	25"	Sacandaga Reservoir, N. Y.	1940	Peter Dubuc
re, Walleyed	22—4	36¼"	21"	Fort Erie, Ontario	1943	Patrick E. Noon
imon, Atlantic	79—2	....	....	Tanaelv, Norway	1928	Henrik Henriksen
imon, Chinook	83	....	....	Umpqua River, Oregon	1910	F. R. Steel
imon, Landlocked	22—8	36"	....	Sebago Lake, Maine	1907	Edward Blakely
ut, Brook	14—8	....	....	Nipigon River, Ontario	1916	Dr. W. J. Cook
ut, Brown	39—8	....	....	Loch Awe, Scotland	1866	W. Muir
ut, Cutthroat	41	39"	....	Pyramid Lake, Nevada	1925	John Skimmerhorn
ut, Lake	63	47½"	....	Lake Athapapuskow, Manitoba	1930	Miss L. L. Hayes
ut, Rainbow or Steelhead	32—8	37½"	30¼"	Pend Oreille Lake, Idaho	1945	Lawrence Hamilton

FLY AND BAIT CASTING RECORDS

Source: H. H. Smedley, Muskegon, Mich.

Fly Casting

Fish	Distance in. ft.	Holder	Country	Fish	Distance in. ft.	Holder	Country
Salmon.....	197	D. Miller.....	United States	Trout*	146	M. Hedge.....	Europe
Trout*	183	R. Miller.....	United States	Trout*	141	P. H. Moore.....	Canada
Salmon.....	172	T. Edwards.....	Europe	Trout†	139	A. Godart.....	Europe
Salmon.....	172	P. H. Moore.....	Canada	Trout‡	132	A. Schultz.....	England
Trout†	165	E. Anderegg.....	United States	Trout§	131	G. Chatt.....	United States
Salmon.....	164	T. Edwards.....	England	Trout†	121	P. Creusevaut.....	Europe
Trout†	159	J. Sparks.....	United States	Trout*	118	H. L. Maitland.....	Australia
Trout*	150	M. Hedge.....	England	Trout†	116	J. May.....	England
Trout†	150	M. Hedge.....	England	Trout†	116	T. H. Brunn.....	Australia
Trout†	150	M. Hedge.....	Europe	Trout†	97	T. H. Brunn.....	Australia

*Rod not over 6 ounces. †Rod not over 8 ounces. ‡Rod unlimited. §Rod not over 5 ounces.

Bait Casting

Wt. in oz.	Dist. in ft.	Holder	Country	Wt. in oz.	Dist. in ft.	Holder	Country
½	422	W. Lovely.....	United States	¼	258	W. Newcomb.....	United States
¾	417	L. Sens.....	United States	¾	255	P. Creusevaut.....	Europe
¾	385	C. Anthes.....	United States	½	242	H. J. Hardy.....	England
½	355	W. Greenaway.....	Europe	¼	192	P. Creusevaut.....	Europe
¾	334	F. Galbraith.....	Canada	½	189	W. Greenaway.....	England
½	326	F. Galbraith.....	Canada	¾	159	T. C. Bottrell.....	Australia
½	320	T. Edwards.....	England	½	148	L. Vance.....	Australia

1946 National Champions

Source. Earl Osten, Executive Secretary, National Association of Angling and Casting Clubs.

MEN

All-around—Ernest Liotta, Jr., Cleveland
 All-distance—Ernest Liotta, Jr., Cleveland, 3076 ft.
 Distance baits—Ernest Liotta, Jr., Cleveland, 2162 ft.
 Distance flies—Jimmy Green, San Francisco, 937 ft.
 All-accuracy—Charles Sutphin, Indianapolis, 389 pts.
 Accuracy baits—Charles Sutphin, Indianapolis, 197 pts.
 Accuracy flies—L. S. Williams-Wm. J. Lovely, St. Louis, 196 pts.

JUNIOR

All-accuracy—Richard Brooks, Indianapolis, 350 pts.
 Accuracy baits—Roger Herrett, Cleveland-Leonard Thornton, Wetumpka, Ala., 181 pts.
 Accuracy flies—Richard Brooks, Indianapolis, 174 pts.

WOMEN

All-accuracy—Dorothy Vogel, Paterson, N. J., 374 pts.
 Accuracy baits—Mrs. Harry Sutphin, Indianapolis, 187 pts.
 Accuracy flies—Dorothy Vogel, Paterson, N. J., 189 pts.

DISTANCE EVENTS

	Avg.	Long cast
¾ oz. bait..... Ernest Liotta, Jr., Cleveland...	407½	415
¾ oz. bait..... Wm. J. Lovely, St. Louis...	335¾	343
Salmon-fly dist... Dick Miller, Huntington Beach, California.....	183¾	197
Trout-fly dist... Jimmy Green, San Francisco.	144	149

ACCURACY EVENTS

	Score
Dry fly..... Henry Fujita, Sr., Cleveland.....	99
Wet fly..... Tony Accetta, Cleveland.....	100
¾ oz. bait..... Charles Sutphin, Indianapolis.....	98
¾ oz. bait..... J. A. Halbleib, Louisville.....	100

WOMEN'S ACCURACY EVENTS

	Score
Dry fly..... Joan Salvato, Paterson, N. J.....	92
Wet fly..... Mary Reisman, Kansas City, Mo.....	99
¾ oz. bait..... Mrs. Harry Sutphin, Indianapolis.....	94
¾ oz. bait..... Margaret Weaver, Chicago.....	96

JUNIOR ACCURACY EVENTS

	Score
Dry fly..... Richard Brooks, Indianapolis.....	95
Wet fly..... Roger Applegren, Jr., Cleveland.....	86
¾ oz. bait..... Leonard Thornton, Wetumpka, Ala.....	95
¾ oz. bait..... Robert Stein, Gary, Ind.....	96

SKISH EVENTS

	Score
Men's bait..... Wilbur Brooks, Indianapolis.....	82
Men's fly..... George Applegren, Jr., Chicago.....	84
Women's bait..... Mary Reisman, Kansas City, Mo.....	63
Women's fly..... Dorothy Vogel, Paterson, N. J.....	97
Junior Bait..... Leonard Thornton, Wetumpka.....	49

TEAM EVENT

¾ oz. bait..... Indianapolis Hot Shots, Indianapolis	472
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CLUB PENNANT

East Cleveland Rod and Gun Club
 Carondelet Fly and Bait Casting Club, St. Louis

ICE HOCKEY

HOCKEY, by birth and upbringing a Canadian game, is an offshoot of field hockey. Some historians state that the first hockey game was played in Montreal in December, 1879, between two teams composed almost exclusively of McGill University students, but others assert that Kingston, Ont., or Halifax, N. S., were the scenes of earlier hockey games. In the Montreal game of 1879 there were fifteen players on a side and they used an assortment of crude sticks to keep the puck in motion. Early rules allowed nine men on a side but the number was reduced to seven in 1886 and finally reduced to six, the standard of today.

The first governing body of the sport was the Amateur Hockey Association of Canada, organized in 1887. In the winter of 1894-95 a group of college students from the United States visited Canada, saw hockey played, became enthused over the game and introduced it as a winter sport when they returned home. This was the

start of hockey in the United States. The first professional league was the International Hockey League that operated, strangely enough, not in Canada but in northern Michigan in 1904-06 and included as players such famous stars as Cyclone Taylor and Hod and Bruce Stuart, later included in the Hockey Hall of Fame.

Until 1910, professionals and amateurs were allowed to play together on "mixed teams", but this arrangement ended with the formation of the first "big league", the National Hockey Association, in eastern Canada in 1910. The Pacific Coast League, to provide professional hockey in the West, was organized in 1911 with Seattle (and later other American cities) included in the circuit. The National Hockey League replaced the National Hockey Association in 1917. Boston, in 1924, was the first American city to join that circuit. The Stanley Cup, top trophy of hockey, was competed for by "mixed teams" from 1894 to 1910, thereafter by professionals.

Ice Hockey Statistics

Source: James C. Hendy, editor, *Official National Hockey Guide*.

Professional

NATIONAL HOCKEY LEAGUE

Stanley Cup Play-Offs, 1946

(Figures in parentheses indicate number of victories.)

Final

Montreal (4) vs. Boston (1)

March 30—Montreal 4, Boston 3*
April 2—Montreal 3, Boston 2*
April 4—Montreal 4, Boston 2
April 7—Boston 3, Montreal 2*
April 9—Montreal 6, Boston 3

Overtime.

Semifinals

Montreal (4) vs. Chicago (0)

March 19—Montreal 6, Chicago 2
March 21—Montreal 5, Chicago 1
March 24—Montreal 8, Chicago 2
March 26—Montreal 7, Chicago 2

Boston (4) vs. Detroit (1)

March 19—Boston 3, Detroit 1
March 21—Detroit 3, Boston 0
March 24—Boston 5, Detroit 2
March 26—Boston 4, Detroit 1
March 28—Boston 4, Detroit 3*

FINAL 1945-1946 STANDING OF THE TEAMS

(Regular season.)

	Goals							Goals					
	W.	L.	Td.	Pts.	For	Agst.		W.	L.	Td.	Pts.	For	Agst.
Montreal Canadiens.....	28	17	5	61	172	134	Detroit Red Wings.....	20	20	10	50	146	159
Montreal Bruins.....	24	18	8	56	167	156	Toronto Maple Leafs.....	19	24	7	45	174	185
Chicago Black Hawks.....	23	20	7	53	200	178	New York Rangers.....	13	28	9	35	144	191

Before the fish hook was invented, fishermen used a "gorge," a piece of flint or

other stone which a fish can swallow but cannot eject.—*Encyc. Brit.*

Leading Scorers in the National Hockey League

STANLEY CUP PLAY-OFFS

REGULAR SEASON

Player and club	Games	Gls.	As.	Pts.	Pen. in min.	Player and club	Games	Gls.	As.	Pts.	Pen. in min.
Elmer Lach, Montreal.....	9	5	12	17	4	Max Bentley, Chicago.....	47	31	30	61	6
Toe Blake, Montreal.....	9	7	6	13	5	Gaye Stewart, Toronto.....	50	37	15	52	8
Maurice Richard, Montreal...	9	7	4	11	15	Toe Blake, Montreal.....	50	29	21	50	2
Milt Schmidt, Boston.....	10	3	5	8	2	Clint-Smith, Chicago.....	50	26	24	50	2
Bep Guidolin, Boston.....	10	5	2	7	13	Maurice Richard, Montreal...	50	27	21	48	50
Woody Dumart, Boston.....	10	4	3	7	0	Bill Mosienko, Chicago.....	40	18	30	48	12
Bob Bauer, Boston.....	10	4	3	7	2	Ab DeMarco, New York.....	50	20	27	47	20
Bob Fillion, Montreal.....	9	4	3	7	6	Elmer Lach, Montreal.....	50	13	34	47	34
Dutch Hiller, Montreal.....	9	4	2	6	2	Alex Kaleta, Chicago.....	49	19	27	46	17
Murph Chamberlain, Montreal	9	4	2	6	18	Billy Taylor, Toronto.....	48	23	18	41	14
Don Gallinger, Boston.....	10	2	4	6	2	Pete Horeck, Chicago.....	50	20	21	41	34

STANLEY CUP WINNERS

Emblematic of world professional championship.

1894—Montreal A. A. A.	1911—Ottawa Senators	1929—Boston Bruins
1895—Montreal Victorias	1912—Quebec Bulldogs	1930—Montreal Canadiens
1896—Winnipeg Victorias	1913—Quebec Bulldogs	1931—Montreal Canadiens
1897—Montreal Victorias	1914—Toronto	1932—Toronto Maple Leafs
1898—Montreal Victorias	1915—Vancouver Millionaires	1933—N. Y. Rangers
1899—Montreal Victorias	1916—Montreal Canadiens	1934—Chicago Black Hawks
1900—Montreal Shamrocks	1917—Seattle Metropolitans	1935—Montreal Maroons
1901—Winnipeg Victorias	1918—Toronto Arenas	1936—Detroit Red Wings
1902—Montreal A. A. A.	1919—No series	1937—Detroit Red Wings
1903—Ottawa Silver Seven	1920—Ottawa Senators	1938—Chicago Black Hawks
1904—Ottawa Silver Seven	1921—Ottawa Senators	1939—Boston Bruins
1905—Ottawa Silver Seven	1922—Toronto St. Patricks	1940—N. Y. Rangers
1906—Montreal Wanderers	1923—Ottawa Senators	1941—Boston Bruins
1907—Kenora Thistles	1924—Montreal Canadiens	1942—Toronto Maple Leafs
1907—Montreal Wanderers	1925—Victoria Cougars	1943—Detroit Red Wings
(March)	1926—Montreal Maroons	1944—Montreal Canadiens
1908—Montreal Wanderers	1927—Ottawa Senators	1945—Toronto Maple Leafs
1909—Ottawa Senators	1928—N. Y. Rangers	1946—Montreal Canadiens
1910—Montreal Wanderers		

AMERICAN HOCKEY LEAGUE

Final 1945-1946 standing of the teams

(Regular season)

EASTERN DIVISION

	W.	L.	Td.	Pts.	Goals For	Agst.
Buffalo*	38	16	8	84	270	196
Hershey	26	26	10	62	213	221
Providence	23	33	6	52	221	254
New Haven	14	38	10	38	199	263

WESTERN DIVISION

	W.	L.	Td.	Pts.	Goals For	Agst.
Indianapolis	33	20	9	75	286	238
Pittsburgh	30	32	10	70	262	226
Cleveland*	28	26	8	64	269	254
St. Louis	21	32	9	51	198	266

*Buffalo beat Cleveland in championship play-offs, 4 games to 3.

Leading Scorers

(Regular season)

Player and club	Games	Gls.	As.	Pts.	Pen. in min.
Les Douglas, Indianapolis...	62	44	46	90	35
Norm Larson, Hershey.....	64	36	53	89	20
Tom Burlington, Cleveland...	59	36	46	82	14
Pete Leswick, Indianapolis...	61	29	52	81	10
Lou Trudel, Cleveland.....	61	33	46	79	24
Joe Bell, Hershey.....	62	46	31	77	26
Morey Rimstad, St. Louis....	62	34	43	77	15
Les Cunningham, Cleveland...	62	33	44	77	10
Wallie Wilson, Pittsburgh....	57	34	41	75	32
Gino Rozzini, Hershey.....	56	31	40	71	63
Fred Hunt, Buffalo.....	62	27	43	70	32

Hockey Puck Travels 88 m.p.h.

A hockey puck travels at an average speed of 88 miles per hour, according to a series of tests made with an oscilloscope by Dr. Dana Warren, Omaha University physics professor. Dr. Warren put one set of photoelectric cells in front of the blue line and another across the net, 55 feet away. Then George Homenuke of the Omaha Knights kept shooting until the average was reached.

Kiefer Turns Professional

Adolph Kiefer, holder of every world backstroke record, turned professional in 1946. Kiefer won approximately 2,000 races and was beaten only twice during his twelve years as an amateur.

UNITED STATES HOCKEY LEAGUE

Final 1945-1946 standing of the teams

	Goals				
	W.	L.	Td.	Pts.	For Agst.
Kansas City*	35	17	4	74	271 185
Omaha	31	22	3	65	210 190
St. Paul	28	26	2	58	208 186
St. Louis	27	25	4	58	269 230
Worth	24	31	1	49	186 238
St. Joseph	21	32	3	45	218 259
Minneapolis	20	33	3	43	192 262

*Kansas City defeated Tulsa for title, 4 games to 2.

Leading Scorers

(Regular season)

Player and club	Games	Gls.	As.	Pts.	Pen.
					in. min.
MacDonald, Kansas City	51	39	60	99	2
Read, Dallas	56	40	53	93	25
Johnston, Kansas City	38	38	34	72	8
Mair, Tulsa	49	37	30	67	4
Smith, Omaha	54	29	38	67	33
Agar, Minneapolis	56	34	32	66	40
Chakowski, Kansas City	52	32	34	66	8
Kapusta, Dallas	56	28	37	65	18
Blade, Kansas City	46	29	36	65	16
Shack, St. Paul	51	28	31	59	37

Amateur

NATIONAL CHAMPIONSHIP FINAL

Played at Vancouver, B. C.

(Figures in parentheses indicate number of victories.)

VANCOUVER CANUCKS (4) VS. BOSTON OLYMPICS (3)

April 12—Boston Olympics 9, Vancouver Canucks 6
 April 15—Vancouver Canucks 9, Boston Olympics 1
 April 17—Boston Olympics 8, Vancouver Canucks 3
 April 19—Boston Olympics 5, Vancouver Canucks 4*

April 22—Vancouver Canucks 5, Boston Olympics 3
 April 24—Vancouver Canucks 3, Boston Olympics 0
 April 26—Vancouver Canucks 6, Boston Olympics 3

*Overtime.

PACIFIC COAST HOCKEY LEAGUE

Final 1945-1946 standing of the teams

NORTHERN DIVISION

	Goals				
	W.	L.	Pct.	For	Agst.
Vancouver Canucks*	37	21	.638	308	247
Portland Eagles	29	29	.500	257	261
Seattle Ironmen	29	29	.500	251	214
New Westminster Royals	26	32	.448	228	268

SOUTHERN DIVISION

	Goals				
	W.	L.	Pct.	For	Agst.
Oakland Oaks	25	15	.625	188	159
Hollywood Wolves*	21	19	.525	157	157
San Diego Sky Hawks	21	19	.525	145	139
Los Angeles Monarchs	17	23	.425	189	208
San Francisco Shamrocks	11	29	.275	159	229

*Won divisional play-offs. Vancouver won championship play-offs, 4 games to 1.

EASTERN AMATEUR HOCKEY LEAGUE

Final 1945-1946 standing of the teams

(Regular season)

	Goals				
	W.	L.	Td.	Pts.	For Agst.
Boston Olympics	32	12	8	72	258 162
Philadelphia Falcons	26	21	5	57	180 186
New York Rovers	25	20	7	57	240 181
Baltimore Clippers	19	25	8	46	164 205
Washington Lions	8	32	12	28	128 236

Boardwalk Trophy Standing

	Goals				
	W.	L.	Td.	Pts.	For Agst.
Boston Olympics*	8	3	1	17	59 50
Philadelphia Falcons	8	3	1	17	50 39
Baltimore Clippers	6	5	1	13	47 43
Washington Lions	4	6	2	10	35 48
New York Rovers	1	10	1	3	23 54

*Declared winner on basis of total goals scored.

Hec (Toe) Blake, captain of the Montreal Canadiens, National Hockey League and Stanley Cup champions in 1946, has made many goals during his career, but probably none were more important than two points he scored during the 1945-46 season. The first, made against the Toronto Maple Leafs, tied up the game and gave the Canadiens the league title. The second, with Boston's Bruins the victims, snapped a 3-3 deadlock in the final game of the Stanley Cup play-offs and won the famous trophy for the Canadiens.

Kyriakides, Cote Marathon Victors

A Greek, Stylianos Kyriakides, and a Canadian, Gerard Cote, won the two outstanding distance races in the United States in 1946, the Boston and the National A. A. U. marathons. Kyriakides, who hails from Athens, won the Boston event in 2:29:27, while Cote, from St. Hyacinthe, Quebec, was timed in 2:47:53.6. It was Cote's third triumph in the national contest, a record shared with the late Pat Dengis. Cote's previous victories were scored in 1940 and 1943.

POLO

Polo originated "somewhere east of Suez" but exactly where never has been determined. There is pictorial proof that it was played many centuries ago in Persia, Japan, China and Tibet, but it reached England by way of a border tribe in India known as the Manipuri. British army officers in India, about 1860, found the Manipuri playing polo and learned the game from them. The fact that the Manipuri used small native horses—they had no others—was the reason for the early height limit (14 hands) on polo mounts, from which arose the custom of calling them "polo ponies," which was abandoned in 1919.

In 1869 some officers of the 10th Hussars, returning from India, introduced the game in England and informal games were played with as many as eight players on a side. Formal competition at Hurlingham, the great shrine of the game, began in 1876 with five players on a side, which

number was cut to four in 1882. In 1884 an outstanding English player by the name of John Watson invented the backhand stroke and much improved the tactics of the game.

James Gordon Bennett, Jr., noted American newspaper owner and editor, saw polo at Hurlingham in 1875, brought the implements to this country, had a carload of cow ponies sent up from Texas and promoted a game that was played indoors at the Dickel Riding Academy at Fifth Avenue and 39th Street, New York City, in 1876. Polo moved outdoors to the Jerome Park race course and other suitable places soon after. One field on which it was played, at Fifth Avenue and 110th Street, was taken over by the New York baseball team in the National League and that is why the field on which the "Giants" play ball, although there since have been two changes in site, still is called "the Polo Grounds."

Polo Statistics

INTERNATIONAL MATCHES

Source: United States Polo Association.

Great Britain vs. United States

- | | |
|---|---|
| <p>1886 Won by Great Britain (10-4, 14-2) at Newport, R. I. Great Britain: No. 1, Capt. T. Hone; No. 2, Hon. R. Lawley; No. 3, Capt. Malcolm Little; Back, John Watson. United States: No. 1, Winthrop K. Thorne; No. 2, R. Belmont; No. 3, Foxhall P. Keene; Back, Thomas Hitchcock.</p> <p>1902 Won by Great Britain (1-2, 6-1, 7-1) at Hurlingham. Great Britain: No. 1, Cecil P. Nickalls; No. 2, P. W. Nickalls and F. M. Freake; No. 3, Walter Buckmaster and George A. Miller; Back, Charles D. Miller and Walter Buckmaster. United States: No. 1, R. L. Agassiz and J. M. Waterbury, Jr.; No. 2, J. E. Cowdin and Lawrence Waterbury; No. 3, Foxhall P. Keene; Back, Lawrence Waterbury and R. L. Agassiz.</p> <p>1909 Won by United States (9-5, 8-2) at Hurlingham. United States: No. 1, Lawrence Waterbury; No. 2, J. M. Waterbury, Jr.; No. 3, Harry Payne Whitney; Back, Devereux Milburn. Great Britain: No. 1, Capt. Herbert H. Wilson and Harry Rich; No. 2, F. M. Freake; No. 3, P. W. Nickalls; Back, Lord Wodehouse and Capt. J. Hardress Lloyd.</p> | <p>1911 Won by United States (41½-3, 41½-31½) at Meadow Brook. United States: No. 1, Lawrence Waterbury; No. 2, J. M. Waterbury, Jr.; No. 3, Harry Payne Whitney; Back, Devereux Milburn. Great Britain: No. 1, Capt. Leslie St. G. Cheape; No. 2, A. Noel Edwards; No. 3, Capt. J. Hardress Lloyd; Back, Capt. Herbert H. Wilson.</p> <p>1913 Won by United States (51½-3, 41½-41½) at Meadow Brook. United States: No. 1, Lawrence Waterbury and Louis E. Stoddard; No. 2, J. M. Waterbury, Jr., and Lawrence Waterbury; No. 3, Harry Payne Whitney; Back, Devereux Milburn. Great Britain: No. 1, Capt. Leslie St. G. Cheape; No. 2, A. Noel Edwards and F. M. Freake; No. 3, Capt. R. G. Ritson; Back, Capt. Vivian N. Lockett.</p> <p>1914 Won by Great Britain (81½-3, 4-2¾) at Meadow Brook. Great Britain: No. 1, Capt. H. A. Tomkinson; No. 2, Capt. Leslie St. G. Cheape; No. 3, Maj. F. W. Barrett; Back, Capt. Vivian N. Lockett. United States: No. 1, Rene LaMontagne; No. 2, J. M. Waterbury, Jr.; No. 3, Devereux</p> |
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International Matches—(cont.)

- Milburn and Lawrence Waterbury; Back, Lawrence Waterbury and Devereux Milburn.
- 1 Won by United States (11-4, 10-6) at Hurlingham. United States: No. 1, Louis E. Stoddard; No. 2, Thomas Hitchcock, Jr.; No. 3, J. Watson Webb, Back, Devereux Milburn. Great Britain: No. 1, Lt. Col. H. A. Tomkinson; No. 2, Maj. F. W. Barrett; No. 3, Lord Wodehouse; Back, Maj. Vivian N. Lockett.
- 4 Won by United States (16-5, 14-5) at Meadow Brook. United States: No. 1, J. Watson Webb; No. 2, Thomas Hitchcock, Jr.; No. 3, Malcolm Stevenson and Robert E. Strawbridge Jr.; Back, Devereux Milburn. Great Britain: No. 1, Maj. T. W. Kirkwood and Lt. Col. T. P. Melville; No. 2, Maj. F. W. Hurndall and Maj. G. H. Phipps-Hornby; No. 3, Maj. E. G. Atkinson; Back, Lewis L. Lacey.
- 7 Won by United States (13-3, 8-5) at Meadow Brook. United States: No. 1, J. Watson Webb; No. 2, Thomas Hitchcock, Jr.; No. 3, Malcolm Stevenson; Back, Devereux Milburn. Great Britain: No. 1, Capt. Claude E. Pert and Capt. R. George; No. 2, Maj. Austin H. Williams and Capt. J. P. Dening; No. 3, Capt. C. T. I. Roark; Back, Maj. E. G. Atkinson.
- 1930 Won by United States (10-5, 14-9) at Meadow Brook. United States: No. 1, Eric Pedley; No. 2, Earle A. S. Hopping; No. 3, Thomas Hitchcock, Jr.; Back, Winston F. C. Guest. Great Britain: No. 1, Gerald Balding; No. 2, Lewis L. Lacey; No. 3, Capt. C. T. I. Roark; Back, Humphrey P. Guinness.
- 1936 Won by United States (10-9, 8-6) at Hurlingham. United States: No. 1, Eric Pedley; No. 2, Michael G. Phipps; No. 3, Stewart B. Iglehart; Back, Winston F. C. Guest. Great Britain: No. 1, Hesketh H. Hughes; No. 2, Gerald Balding; No. 3, Eric H. Tyrrell-Martin; Back, Humphrey P. Guinness.
- 1939 Won by United States (11-7, 9-4) at Meadow Brook. United States: No. 1, Michael G. Phipps; No. 2, Thomas Hitchcock, Jr.; No. 3, Stewart B. Iglehart; Back, Winston F. C. Guest. Great Britain: No. 1, Robert Skene; No. 2, Aidan Roark; No. 3, Gerald Balding; Back, Eric H. Tyrrell-Martin.

Argentina vs. United States

- 28 Won by United States (7-6, 7-10, 13-7) at Meadow Brook. United States: No. 1, W. A. Harriman; No. 2, Thomas Hitchcock, Jr., and E. A. S. Hopping; No. 3, Malcolm Stevenson and Thomas Hitchcock, Jr.; Back, Winston F. C. Guest. Argentina: No. 1, Arturo Kenny; No. 2, J. D. Nelson; No. 3, J. B. Miles; Back, Lewis L. Lacey.
- 32 Won by United States (9-6, 7-8, 12-10) at Buenos Aires. United States: No. 1, Michael G. Phipps; No. 2, Elmer J. Boeske, Jr.; No. 3, Winston F. C. Guest; Back, William Post, 2d. Argentina: No. 1, Arturo Kenny; No. 2, J. D. Nelson and Martin Reynal; No. 3, Jose Reynal; Back, Manuel Andrada.
- 1936 Won by Argentina (21-9, 8-4) at Meadow Brook. Argentina: No. 1, Luis Duggan; No. 2, Roberto Cavanaugh; No. 3, Andres Gazzotti; Back, Manuel Andrada. United States: No. 1, G. H. Bostwick; No. 2, Gerald Balding; No. 3, Thomas Hitchcock, Jr.; Back, John Hay Whitney.

NATIONAL OPEN CHAMPIONS

- 04 Wanderers (C. Randolph Snowden, John E. Cowdin, J. M. Waterbury, Jr., Lawrence Waterbury) 4½; Freebooters 3.
- 05-09 No tournaments.
- 10 Ranelagh (R. N. Grenfell, F. Grenfell, Earl of Rocksavage, F. A. Gill) 7¾; Point Judith Perroquets 3¾.
- 11 No tournament.
- 12 Cooperstown (F. S. von Stade, C. C. Rumsey, C. P. Beadleston, Malcolm Stevenson) 9; Bryn Mawr 5¾.
- 13 Cooperstown (F. S. von Stade, C. C. Rumsey, C. P. Beadleston, Malcolm Stevenson) 7; Point Judith 2¼.
- 14 Meadow Brook Magpies (N. L. Tilney, J. Watson Webb, W. G. Loew, Howard Phipps) 11; Point Judith-Narragansett 8¾.
- 1915 No tournament.
- 1916 Meadow Brook (Howard Phipps, C. C. Rumsey, W. G. Loew, Devereux Milburn) 8; Coronado 3.
- 1917-18 No tournaments.
- 1919 Meadow Brook (F. H. Prince, Jr., J. Watson Webb, F. S. von Stade, Devereux Milburn) 5; Cooperstown 4.
- 1920 Meadow Brook (F. S. von Stade, J. Watson Webb, R. E. Strawbridge, Jr., Devereux Milburn) 12; Cooperstown 3.
- 1921 Great Neck (L. E. Stoddard, Rodman Wanamaker, 2d, J. Watson Webb, R. E. Strawbridge, Jr.) 8; Rockaway 6.

National Open Champions—(cont.)

- 1922 Argentine (J. B. Miles, J. D. Nelson, D. B. Miles, L. L. Lacey) 14; Meadow Brook 7.
- 1923 Meadow Brook (Raymond Belmont, Thomas Hitchcock, Jr., R. E. Strawbridge, Jr., Devereux Milburn) 12; British Army 9.
- 1924 Midwick (E. G. Miller, Eric L. Pedley, A. P. Perkins, Carleton F. Burke) 6; Wanderers 5.
- 1925 Orange County (W. A. Harriman, J. Watson Webb, Malcolm Stevenson, J. C. Cowdin) 11; Meadow Brook 9.
- 1926 Hurricanes (Stephen Sanford, Eric L. Pedley, Capt. C. T. I. Roark, R. E. Strawbridge, Jr.) 7; Argentine 6.
- 1927 Sands Point (W. A. Harriman, Thomas Hitchcock, Jr., J. C. Cowdin, L. E. Stoddard) 11; Army-in-India 7.
- 1928 Meadow Brook (C. V. Whitney, W. F. C. Guest, J. B. Miles, Malcolm Stevenson) 8; United States Army 5.
- 1929 Hurricanes (Stephen Sanford, Capt. C. T. I. Roark, J. Watson Webb, R. E. Strawbridge, Jr.) 11; Sands Point 7.
- 1930 Hurricanes (Stephen Sanford, Eric L. Pedley, Capt. C. T. I. Roark, R. E. Strawbridge, Jr.) 6; Templeton 5.
- 1931 Santa Paula (Andres Gazzotti, Jose Reynal, Juan Reynal, Manuel Andradra) 11; Hurricanes 8.
- 1932 Templeton (M. G. Phipps, W. F. C. Guest, S. B. Iglehart, R. R. Guest) 16; Greentree 3.
- 1933 Aurora (S. H. Knox, J. P. Mills, E. T. Gerry, E. J. Boeseke, Jr.) 14; Greentree 11.
- 1934 Templeton (M. G. Phipps, W. F. C. Guest, S. B. Iglehart, R. R. Guest) 10; Aurora 7.
- 1935 Greentree (G. H. Bostwick, Thomas Hitchcock, Jr., Gerald Balding, J. H. Whitney) 7; Aurora 6.
- 1936 Greentree (G. H. Bostwick, Gerald Balding, Thomas Hitchcock, Jr., J. H. Whitney) 11; Templeton 10.
- 1937 Old Westbury (M. G. Phipps, Cecil Smith, S. B. Iglehart, C. V. Whitney) 11; Greentree 6.
- 1938 Old Westbury (M. G. Phipps, Cecil Smith, S. B. Iglehart, C. V. Whitney) 16; Greentree 7.
- 1939 Bostwick Field (G. H. Bostwick, R. L. Gerry, Jr., E. T. Gerry, E. H. Tyrrell-Martin) 8; Greentree 7.
- 1940 Aknusti (G. S. Smith, R. L. Gerry, Jr., E. T. Gerry, A. L. Corey, Jr.) 5; Great Neck 4.
- 1941 Gulf Stream (J. H. A. Phipps, M. G. Phipps, C. S. von Stade, A. L. Corey, Jr.) 10; Aknusti 6.
- 1942-45 No tournaments.
- 1946 Herradura, Mexico (Gabriel Gracida, Guillermo Gracida, Alejandro Gracida, Jose Gracida) 11; Los Amigos 9.

International Polo Series, 1946

International polo was resumed in the United States for the first time since 1939. A Mexican quartet consisting of four brothers and sponsored by President Manuel Avila Camacho, provided the opposition. The United States team won the two-game series, 10 to 4 and 11 to 4. Both con-

tests were played on the turf of the famed International Field of the Meadow Brook Club, Westbury, Long Island.

In 1941 the U. S. scored a three-game sweep over the Mexicans at Mexico City.

The line-ups for the 1946 games:

First Game

UNITED STATES (10)	MEXICO (4)
1—M. G. Phipps	1—Gabriel Gracida
2—Cecil Smith	2—Guillermo Gracida
3—S. B. Iglehart	3—Alejandro Gracida
Back—Peter Perkins	Back—Jose Gracida

SCORE BY PERIODS

United States	.....3	1	3	1	1	1—10
Mexico	.....1	0	0	2	0	1—4

Goals—U. S.: Phipps 3, Smith 7. Mexico: Gabriel Gracida 2, Guillermo Gracida 1, No. 1 penalty 1.

Umpires—W. H. Gaylord and Elbridge T. Gerry Jr. Referee—Ramos Cesneros. Time of periods—7½ minutes.

Second Game

UNITED STATES (11)	MEXICO (4)
1—M. G. Phipps	1—Gabriel Gracida
2—Cecil Smith	2—Guillermo Gracida
3—S. B. Iglehart	3—Alejandro Gracida
Back—Peter Perkins	Back—Jose Gracida

SCORE BY PERIODS

United States	.....2	3	0	2	2	2—11
Mexico	.....3	0	0	1	0	0—4

Goals—United States: Phipps 3, Smith 4, Iglehart 2, Perkins 2. Mexico: Gabriel Gracida 2, Guillermo Gracida 1, Alejandro Gracida 1.

Umpires—W. H. Gaylord and W. F. C. Guest. Referee—Ramos Cesneros. Time of periods—7½ minutes.

ROWING

Rowing goes back so far in history that there is no possibility of tracing it to any particular aboriginal source. The oldest rowing race still on the calendar is the "Coxett's Coat and Badge" contest among professional watermen of the Thames (England) that began in 1715. The first Oxford-Cambridge race was held at Henley in 1829. Competitive rowing in the United States began with matches between boats crewed by professional oarsmen of the New York water front. They were oarsmen who used the small boats that plied as ferries from Manhattan Island to Brooklyn and return, or who rowed salesmen down the harbor to meet ships arriving from Europe. Since the first salesman to meet an incoming ship had some advantage over his rivals, there was keen competition in the bidding for fast boats and the best oarsmen. This gave rise to match races for a purse or a side bet on many occasions. The first of such races was held in June, 1851, in four-oared gigs.

Amateur boat clubs sprang up in the United States between 1820 and 1830 and seven students of Yale joined together to purchase a four-oared lap-streak gig in 1843. The first Harvard-Yale race was held Aug. 3, 1852, on Lake Winnepesaukee, N. H. The first time an American college crew went abroad was in 1869 when Harvard challenged Oxford and was defeated on the Thames. There were early college rowing races on Lake Quinsigamond, near Worcester, Mass., and on Saratoga Lake, N. Y., but the Intercollegiate Rowing Association, in 1895, settled on the Hudson, at Poughkeepsie, as the setting for the annual "Poughkeepsie Regatta". The National Association of Amateur Oarsmen, organized in 1872, has conducted annual championship regattas since that time. The first rowing races were held with lap-streak gigs but shells came into general favor about a century ago. The outrigger was invented in 1830 by Clasper, an Englishman. Yale used the sliding seat in 1870.

Rowing Statistics

Yale-Harvard Varsity Race Record

Rowed at Centre Harbor, N. H., in 1852; Springfield, Mass., in 1855, 1872-73, 1876-77; Worcester, Mass., 1859-1870; Saratoga Lake, N. Y., 1874-75; New London, Conn., 1878 to 1895, 1898 to 1916, and 1919 to 1941; Poughkeepsie, N. Y., in 1897; Derby, Conn., in 1918, 1942; and Cambridge, Mass., in 1946. Course was 2 miles in 1852; 3 miles from 1855 to 1875, and 4 miles thereafter.

Year	Winner	Time	Year	Winner	Time	Year	Winner	Time
1852	Harvard	1	1889	Yale	21:30	1918 ⁶	Harvard	10:58
1855	Harvard	22:00	1890	Yale	21:29	1919 ⁷	Yale	21:42½
1859	Harvard	19:18	1891	Harvard	21:23	1920	Harvard	23:11
1860	Harvard	18:53	1892	Yale	20:48	1921	Yale	20:41
1864	Yale	19:01	1893	Yale	25:01½	1922	Yale	21:53
1865	Yale	18:42½	1894	Yale	23:45½	1923	Yale	22:10
1866	Harvard	18:43½	1895	Yale	21:30	1924	Yale	21:58⅔
1867	Harvard	18:12¾	1897	Yale	20:44	1925	Yale	20:26
1868	Harvard	17:48½	1898	Yale	24:02	1926	Yale	20:14⅔
1869	Harvard	18:02	1899	Harvard	20:52½	1927	Harvard	22:35⅔
1870	Harvard	2	1900	Yale	21:12¼	1928	Yale	20:31⅔
1872	Harvard	16:57	1901	Yale	23:37	1929	Yale	21:20
1873	Yale	16:59	1902	Yale	20:20	1930	Yale	20:09⅔
1874 ³	Harvard	16:56	1903	Yale	20:19⅔	1931	Harvard	22:21
1875	Harvard	17:05	1904	Yale	21:40½	1932	Harvard	21:29
1876	Yale	22:02	1905	Yale	22:33½	1933	Harvard	22:46⅔
1877	Harvard	24:36	1906	Harvard	23:02	1934 ⁸	Yale	19:51⅔
1878	Harvard	20:44¾	1907	Yale	21:10	1935	Yale	20:19
1879	Harvard	22:15	1908 ⁴	Harvard	24:10	1936	Harvard	20:19
1880	Yale	24:27	1909	Harvard	21:50	1937 ⁹	Harvard	20:02
1881	Harvard	22:13	1910	Harvard	20:46½	1938	Harvard	20:20
1882	Harvard	20:47½	1911	Harvard	22:44	1939	Harvard	20:48⅔
1883	Harvard	25:46½	1912	Harvard	21:43½	1940	Harvard	21:38
1884	Yale	20:31	1913	Harvard	21:42	1941	Harvard	20:40
1885	Harvard	25:15½	1914	Yale	21:16	1942 ¹⁰	Harvard	10:09⅔
1886	Yale	20:42	1915	Yale	20:52	1943-45	No races	
1887	Yale	22:56	1916 ⁵	Harvard	20:02	1946 ¹¹	Harvard	9:18
1888	Yale	20:10	1917	No race				

¹Harvard won by 3 to 4 lengths. ²Yale ran into Harvard at turn and was disqualified. ³Yale did not finish, disabled in collision. ⁴Time not taken officially as Yale stroke was removed from boat. ⁵Downstream record. ⁶Race was informal; rowed at 2 miles on Housatonic. ⁷Course was 110 feet less than 4 miles. ⁸Record of Thames course; bettered previous mark set in 1916. ⁹Both crews broke upstream record. ¹⁰Rowed at 2 miles. ¹¹Rowed at 1¾ miles.

POUGHKEEPSIE REGATTA RECORD

Source: From *American Rowing*, Copyright, 1932, by Robert F. Kelley; courtesy of G. P. Putnam's Sons.

(Varsity eight-oared shells)

Rowed on Saratoga Lake (3 miles) 1898. Rowed on Lake Cayuga, Ithaca, N. Y. (2 miles) 1920. Racing suspended in 1917, 1918, 1919, 1933, and 1942 to 1946, inclusive.

Year	Time	First	Second	Third	Fourth	Fifth	Sixth
1895	21:25	Columbia	Cornell				
1896	19:59	Cornell	Harvard	Pennsylvania	Columbia		
1897	20:34	Cornell	Yale	Harvard			
1897	20:47 $\frac{1}{2}$	Cornell	Columbia				
1898	15:51 $\frac{1}{2}$	Pennsylvania	Cornell	Wisconsin	Columbia		
1899	20:4	Pennsylvania	Wisconsin	Cornell	Columbia		
1900	19:44 $\frac{3}{4}$	Pennsylvania	Wisconsin	Cornell	Columbia		
1901	18:53 $\frac{3}{4}$	Cornell	Columbia	Wisconsin	Georgetown	Syracuse	Pennsylvania
1902	19:59 $\frac{1}{2}$	Cornell	Wisconsin	Columbia	Pennsylvania	Syracuse	Georgetown
1903	18:57	Cornell	Georgetown	Wisconsin	Pennsylvania	Syracuse	Columbia
1904	20:22 $\frac{3}{4}$	Syracuse	Cornell	Pennsylvania	Columbia	Georgetown	Wisconsin
1905	20:29	Cornell	Syracuse	Georgetown	Columbia	Pennsylvania	Wisconsin
1906	19:36 $\frac{1}{4}$	Cornell	Pennsylvania	Syracuse	Wisconsin	Columbia	Georgetown
1907	20:29 $\frac{1}{2}$	Cornell	Columbia	Navy	Pennsylvania	Wisconsin	Georgetown
1908	19:24 $\frac{1}{2}$	Syracuse	Columbia	Cornell	Pennsylvania	Wisconsin	Georgetown
1909	19:2	Cornell	Columbia	Syracuse	Wisconsin	Pennsylvania	
1910	20:42 $\frac{3}{4}$	Cornell	Pennsylvania	Columbia	Syracuse	Wisconsin	
1911	20:10 $\frac{1}{4}$	Cornell	Columbia	Pennsylvania	Wisconsin	Syracuse	
1912	19:31 $\frac{1}{2}$	Cornell	Wisconsin	Columbia	Syracuse	Pennsylvania	Stamford
1913	19:28 $\frac{3}{4}$	Syracuse	Cornell	Washington	Wisconsin	Columbia	Pennsylvania
1914	19:37 $\frac{1}{4}$	Columbia	Pennsylvania	Cornell	Syracuse	Washington	Wisconsin
1915	19:36 $\frac{3}{4}$	Cornell	Stamford	Syracuse	Columbia	Pennsylvania	
1916	20:15 $\frac{1}{2}$	Syracuse	Cornell	Columbia	Pennsylvania		
1920	11:29 $\frac{1}{2}$	Syracuse	Cornell	Columbia	Pennsylvania		
1921	14:7	Navy	California	Cornell	Pennsylvania		
1922*	13:33 $\frac{3}{4}$	Navy	Washington	Syracuse	Cornell	Columbia	Pennsylvania
1923	14:3 $\frac{1}{2}$	Washington	Navy	Columbia	Syracuse	Cornell	Pennsylvania
1924	15:2	Washington	Wisconsin	Cornell	Pennsylvania	Syracuse	Columbia
1925	19:24 $\frac{1}{4}$	Navy	Washington	Wisconsin	Pennsylvania	Cornell	Syracuse
1926	19:28 $\frac{3}{4}$	Washington	Navy	Syracuse	Pennsylvania	Columbia	California
1927	20:57	Columbia	Washington	California	Navy	Cornell	Syracuse
1928	18:35 $\frac{1}{4}$	California	Columbia	Washington	Cornell		
1929	22:58	Columbia	Washington	Pennsylvania	Navy	Wisconsin	
1930	21:42	Cornell	Syracuse	M. I. T.	California	Columbia	Washington
1931	18:54 $\frac{1}{4}$	Navy	Cornell	Washington	California	Syracuse	Pennsylvania
1932	19:55	California	Cornell	Washington	Navy	Syracuse	Columbia
1934	19:44	California	Washington	Navy	Cornell	Pennsylvania	Syracuse
1935	18:52	California	Cornell	Washington	Navy	Syracuse	Pennsylvania
1936	19:9 $\frac{1}{4}$	Washington	California	Navy	Columbia	Cornell	Pennsylvania
1937	18:33 $\frac{3}{4}$	Washington	Navy	Cornell	Syracuse	California	Columbia
1938	18:19	Navy	California	Washington	Columbia	Wisconsin	Cornell
1939†	18:12 $\frac{3}{4}$	California	Washington	Navy	Cornell	Syracuse	Wisconsin
1940	22:42	Washington	Cornell	Syracuse	Navy	California	Columbia
1941	18:53 $\frac{10}{10}$	Washington	California	Cornell	Syracuse	Princeton	Wisconsin

Seventh-place finishers: 1925, Columbia; 1926, Wisconsin; 1927, Pennsylvania; 1928, Pennsylvania; 1930, Pennsylvania; 1931, Columbia; 1932, Pennsylvania; 1934, Columbia; 1935, Columbia; 1936, Syracuse; 1937, Wisconsin; 1938, Syracuse; 1939, Columbia; 1940, Wisconsin; 1941, Rutgers.

Eighth-place finishers: 1926, Cornell; 1930, Wisconsin; 1931, Wisconsin; 1932, M. I. T.; 1940, Princeton; 1941, M. I. T.

Ninth-place finishers: 1931, M. I. T.; 1941, Columbia.

*Record for three miles. †Record for four miles.

The Harvard varsity crew's victory over Yale on the Charles River, Cambridge, Mass., last June, was the eighth in succession for the Crimson over the Blue. Harvard's winning streak over the Elis, interrupted by the war from 1943-45, is the longest on record between the old rivals.

A crowd estimated at 500,000 saw the Oxford crew defeat Cambridge last March in their first meeting over the traditional Thames River course, London, since 1939. Oxford had a three-length lead at the end of the four-mile event, which was having its ninety-second renewal. Cambridge won the classic in 1939.

YACHTING

... sailed in search of the Golden
... Cleopatra (according to Shake-
...) had a royal barge with purple
... Columbus had three sailing ships
... he crossed the Atlantic westward
... 92. But who the first sailor was and
... he launched his primitive craft no-
... ever will know. The word "yacht" is
... ech origin and the first "yacht race"
... record in the English language was a
... ag contest from Greenwich to Graves-
... and return in 1662 between a Dutch
... t and an English yacht designed and,
... me part of the race, sailed by Charles
... England. The royal yacht won the
... est.

... the first yacht club was organized at
... , Ireland, in 1720 under the name
... the Cork Harbour Water Club, later
... ged to the Royal Cork Yacht Club.
... Royal Yacht Squadron was organized

at Cowes in 1812 and the name changed to
the Royal Yacht Club in 1820. The New
York Yacht Club was organized aboard
the Stevens schooner "Gimcrack" on July
30, 1844, and a clubhouse erected at Ely-
sian Fields, Hoboken, N. J., the following
year.

From that time until the Civil War
races were held over courses starting from
the water off the yacht club promontory.
One course was to the Sandy Hook Light-
ship and return.

In 1850 the celebrated "America" was
built by a group of New York yachtsmen
and sent abroad to compete at Cowes. In
a race around the Isle of Wight, with a
special cup as a prize, the "America" de-
feated fourteen English boats and brought
back the trophy that has been raced for
as "the America's Cup" in many interna-
tional yacht races since that time.

Yachting Statistics

AMERICA'S CUP RECORD

Figures in parentheses indicate number of races won

Dates	Winner, Owner, Country	Loser, Owner, Country
22, 1851.....	AMERICA (1), J. C. Stevens, U. S.	AURORA, J. Le Marchant, England
3-10, 1870.....	MAGIC (1), F. Osgood, U. S.	CAMBRIA, J. Ashbury, England
6-23, 1871.....	COLUMBIA (2), F. Osgood, U. S.	LIVONIA (1), J. Ashbury, England
	SAPPHO (2), Wm. P. Douglass, U. S.	
11-12, 1876.....	MADELINE (2), J. Dickerson, U. S.	COUNTESS OF DUFFERIN, C. Gifford, Canada
13-10, 1881.....	MISCHIEF (2), J. Busk, U. S.	ATALANTA, A. Cuthbert, Canada
14-16, 1885.....	PURITAN (2), J. Forbes, U. S.	GENESTA, Sir R. Sutton, England
9-11, 1886.....	MAYFLOWER (2), Gen. J. Paine, U. S.	GALATEA, Lt. Henn, R.N., England
17-30, 1887.....	VOLUNTEER (2), Gen. J. Paine, U. S.	THISTLE, J. Bell, England
*-13, 1893.....	VIGILANT (3), Messrs. Iselin-Morgan, U. S.	VALKYRIE II, Lord Dunraven, England
7-12, 1895.....	DEFENDER (3), Messrs. Iselin-Morgan, U. S.	VALKYRIE II, Lord Dunraven, England
16-20, 1899.....	COLUMBIA (3), Messrs. Iselin-Morgan, U. S.	SHAMROCK I, Sir Thomas Lipton, England
28-Oct. 4, 1901.....	COLUMBIA (3), P. Morgan, U. S.	SHAMROCK II, Sir Thomas Lipton, England
22-Sept. 3, 1903.....	RELIANCE (3), Iselin, et al, U. S.	SHAMROCK III, Sir Thomas Lipton, England
15-27, 1920.....	RESOLUTE (3), R. Emmons, et al, U. S.	SHAMROCK IV (2), Sir Thomas Lipton, England
13-17, 1930.....	ENTERPRISE (4), Vanderbilt-Aldrick, U. S.	SHAMROCK V, Sir Thomas Lipton, England
17-25, 1934.....	RAINBOW (4), H. Vanderbilt, U. S.	ENDEAVOUR (2), T. O. M. Sopwith, England
31-Aug. 5, 1937.....	RANGER (4), H. Vanderbilt, et al, U. S.	ENDEAVOUR II, T. O. M. Sopwith, England

... first race held off Cowes, Isle of Wight, England; from 1870 to 1920 races held off New York Bay; from
to 1937 races held off Newport, R. I.

1946 Y. R. A. OF LONG ISLAND SOUND CHAMPIONS

International Class—Feather, J. L. Merrill.
... ss S—Kandahar, P. S. Patton.
... antic—Whim, Miss Aileen Shields.
... r—Bolt, Romeyn Everdell.
... tory—Stormy, George W. May.
... tning—Rogue, Jack Webb.
... met—Hal, E. E. Halahan.
... e—Ten—Hurricane, H. G. Herbert.

Snipe—Skipper, Miss Donna Sandkam.
Handicap, Div. IV—Tidsfordriv, Richard
Sheehan.
Handicap, Div. VI—Toughie, Theodore
Koepper.
Handicap, Div. VII—Patricia, G. J. Bien-
stock.

WORLD STAR CLASS CHAMPIONS

Source: George W. Elder, President, International Star Class Yacht Racing Association.

Year	Winner	Skipper	Skipper's fleet	Where held
1922	TAURUS	W. L. Inslee	Western L. I. Sound	Western L. I. Sound
1923	TAURUS	W. L. Inslee	Western L. I. Sound	Western L. I. Sound
1924	LITTLE BEAR	J. R. Robinson	Western L. I. Sound	Western L. I. Sound
1925	ACE	Adrian Iselin II	Western L. I. Sound	Western L. I. Sound
1926	RHODY	B. W. Comstock	Narragansett Bay	Western L. I. Sound
1927	TEMPE III	Walton Hubbard	Newport Harbor	Warwick, R. I.
1928	SPARKLER II	P. E. Edrington	New Orleans Gulf	Newport Beach, Calif.
1929	EEL	J. G. Johnson	Chesapeake Bay	New Orleans, La.
1930	PEGGY WEE	A. Knapp	Western L. I. Sound	Gibson Island, Md.
1931	COLLEEN	W. J. McHugh	Central L. I. Sound	Western L. I. Sound
1932	MIST	Edward Fink	Los Angeles Harbor	Southport, Conn.
1933	THREE STAR TWO	Glenn Waterhouse	E. San Francisco Bay	Los Angeles, Calif.
1934	BY-C	H. F. Beardslee	Newport Harbor	San Francisco, Calif.
1935	BY-C	H. F. Beardslee	Newport Harbor	Newport Beach, Calif.
1936	ACE	Adrian Iselin II	Western L. I. Sound	Rochester, N. Y.
1937	LECKY	Milton Wegeforth	San Diego Bay	Western L. I. Sound
1938	PIMM	Walter von Hutschler	Hamburg	San Diego, Calif.
1939	PIMM	Walter von Hutschler	Hamburg	Kiel, Germany
1940	RAMBUNCTIOUS	Jim Cowie	Los Angeles Harbor	San Diego, Calif.
1941	WENCH	George Fleitz	Los Angeles Harbor	Los Angeles, Calif.
1942	*	Harry G. Nye, Jr.	Southern Lake Mich.	Chicago, Ill.
1943	*	Arthur M. Deacon	Western L. I. Sound	Bay Shore, N. Y.
1944	*	Gerald Driscoll	San Diego Bay	Chicago, Ill.
1945	*	Malin Burnham	San Diego Bay	Stamford, Conn.
1946	WENCH II	George Fleitz	Los Angeles Harbor	Havana

*Indicates skipper's series in which the contestants drew for local boats each day and brought their own sails.

LACROSSE

North-South Series

The annual North-South intercollegiate lacrosse game at Baltimore was resumed in 1946 and ended in a 14-14 tie. Results of previous games follow:

1940—North 6, South 5

1941—South 7, North 6

1942—North 6, South 3

1943—South 9, North 5

THE 1946 LINE-UPS

North—Gaines (Princeton), Merryman, (Tufts), IH; Hausman (Army), Mead (Rensselaer P. I.), OH; E. Ransome (Princeton), Jordan (Rensselaer), FA; Hadley (Army), Rogers (Hobart), SA; Devens (Army), Fish (Princeton), Garland (Rensselaer), C; Walker (Army), Nolan (Penn State), Nilen (City College of New York), SD; P. Ransome (Princeton), FD; Tenhula (Penn State), CP; Bresnahan (Army), Lalor Rensselaer), P; Ogden (Princeton), Hollenbach (Penn State), G.

South—Chambers (Navy), Ross (Duke), IH; McLean (Navy), OH; Hoyert (Maryland), Kirk (Navy), FA; Corrigan (Duke), Roberts (Johns Hopkins), Carrington (Navy), SA; Hanson (Navy), W. Ruppertsberger (Maryland), C; Houck (Navy), Dubbert (Johns Hopkins), Gilbert (Duke), Bowditch (Swarthmore), SD; Gorsuch (Duke), J. Ruppertsberger (Maryland), FD; Hewitt (Johns Hopkins), CP; Feters (Maryland), P; Courtney (Johns Hopkins), Hoffecker (Maryland), G.

PATTON, OUTSTANDING ATHLETE

So brilliant was the military record of the late Gen. George S. Patton, Jr., that many may have forgotten his achievements as an athlete. He was a poloist until he was 50, a gentleman jockey in his earlier years, a swimmer, and a track and field star.

In 1912 General Patton competed in the modern pentathlon at the Olympic Games in Stockholm and finished fifth. At West Point, which he entered in 1909, General Patton proved to be an outstanding all-around athlete. He was a sprinter, an expert fencer, swimmer, rider, and shot. His exploits earned for him the position of cadet adjutant, second highest post in his class.

DOG RACING

A record for attendance at a dog racing program in the United States was set on June 14, 1946, when 24,250 fans turned out for the 10-race card at the Wonderland course, Revere, Mass.

Greyhound racing is flourishing in England. Britain's 52 tracks hold meetings twice a week throughout the year. The sport has such a hold on the public that crowds of 50,000 and 60,000 are common.

VOLLEYBALL

The Pasadena (Calif.) Aces won the National A. A. U. volleyball championship in 1946 by defeating the San Francisco Embarcaderos in the final, 15-6, 16-18, 17-15. The event was held at Seattle.

MOTORBOATING

the source of power—the internal combustion engine—is the same in the motorboat as it is in the automobile, the history of motorboat racing parallels that of auto racing. There was a sporting risk in driving the early power boats. As soon as they began to show a degree of dependability, there came the informal rivalries on the rivers and lakes. These led to the annual contests of speed and endurance

over marked courses under the control of the American Power Boat Association. The races were severe tests of all parts of power boats and what was learned in the annual Gold Cup competition, which started in 1904, caused a great improvement in the designing of engines and hulls. The development of the outboard motor opened up another branch of power boat competition of wide popularity.

Motorboating Statistics

Source: American Power Boat Association and Motor Boating Magazine.

GOLD CUP WINNERS

Beginning with 1922 the race for the American Power Boat Association Gold Cup was open only to placement boats of over 25 feet in length and powered with motors of not more than 625 inches piston displacement.

Sponsor	Winner and owner	Time of best heat	Best heat speed m.p.h.
Columbia Yacht Club.....	STANDARD, C. C. Riotte.....	1:33:30	23.6
Columbia Y. C.....	VINGT-ET-UN II, W. Sharpe Kilmer.....	1:27:03	25.3
Chippewa Bay Y. C.....	CHIP, J. Wainwright.....	1:52:38	15.9
Chippewa Bay Y. C.....	CHIP II, J. Wainwright.....	1:27:01	20.6
Chippewa Bay Y. C.....	CHIP II, J. Wainwright.....	1:26:43	20.8
Chippewa Bay Y. C.....	DIXIE II, E. J. Schroeder.....	0:58:13	30.9
Chippewa Bay Y. C.....	DIXIE II, E. J. Schroeder.....	0:58:25	32.9
Thousand Islands Y. C.....	DIXIE III, F. K. Burnham.....	0:57:14	33.6
Thousand Islands Y. C.....	MIT II, J. H. Hayden.....	0:53:31	36.1
Frontenac Y. C.....	P. D. Q. II, Alfred G. Miles.....	0:44:59	44.5
Thousand Islands Y. C.....	ANKLE DEEP, C. S. Mankowski.....	0:41:03	50.49
Thousand Islands Y. C.....	BABY SPEED DEMON II, Paula Blackton.....	0:42:41	48.5
Lake George Reg. Assn.....	MISS DETROIT, Miss Detroit P. B. A.....	0:41:21	49.7
L. I. Sound P. B. A.....	MISS MINNEAPOLIS, Miss Minneapolis B. A.....	0:52:12	36.8
Miss Detroit P. B. A.....	MISS DETROIT II, Garfield A. Wood.....	0:36:47	56.5
Miss Minneapolis B. A.....	MISS DETROIT III, Detroit Yachtsmen.....	0:34:36	52.1
Detroit Y. C.....	MISS DETROIT III, Garfield A. Wood.....	0:32:37	56.3
Detroit Y. C.....	MISS DETROIT III, Garfield A. Wood.....	0:25:44	70.0
Detroit Y. C.....	MISS AMERICA, Garfield A. Wood.....	0:32:52	56.5
Detroit Y. C.....	MISS AMERICA, Garfield A. Wood.....	0:44:17.77	40.6
Detroit Y. C.....	PACKARD-CHRISRAFT, J. G. Vincent.....	0:40:30	44.4
Detroit Y. C.....	PACKARD-CHRISRAFT, J. G. Vincent.....	0:33:48.61	46.4
Detroit Y. C.....	BABY BOOTLEGGERS, Caleb Bragg.....	0:37:11	48.4
Columbia Y. C.....	BABY BOOTLEGGERS, Caleb Bragg.....	0:36:34	49.22
Columbia Y. C.....	GREENWICH FOLLY, G. H. Townsend.....	0:35:18	50.99
Indian Harbor Y. C.....	GREENWICH FOLLY, G. H. Townsend.....	0:35:39.04	50.489
Red Bank & Columbia Y. C.....	IMP, R. F. Hoyt.....	0:32:07	56.05
Red Bank & Columbia Y. C.....	HOTSY TOTS, V. Kliersath.....	0:32:46.47	54.92
Montauk Y. C.....	HOTSY TOTS, V. Kliersath-R. Hoyt.....	0:30:24	59.21
Montauk Y. C.....	DELPHINE IV, Horace E. Dodge.....	0:29:34.4	60.866
Detroit Y. C.....	EL LAGARTO, G. Reis.....	0:31:00.4	58.06
Lake George Club.....	EL LAGARTO, G. Reis.....	0:31:16	57.582
Lake George Club.....	EL LAGARTO, G. Reis.....	0:38:13	47.120
Lake George Club.....	IMPSHI, Horace E. Dodge.....	0:26:13.32	68.645
Detroit Y. C.....	NOTRE DAME, Herbert Mendelson.....	0:27:14.38	66.080
Detroit Y. C.....	ALAGI, Theo Rossi.....	0:26:50.73	67.05
Miss Detroit P. B. A.....	MY SIN, Z. G. Simmons, Jr.....	0:35:04.3	51.316
Indian Harbor Y. C.....	HOTSY TOTS III, Sidney Allen.....	0:25:23.74	70.878
Red Bank Reg. Assn.....	MY SIN, Z. G. Simmons, Jr.*.....		
Detroit Y. C.....	TEMPO VI, Guy Lombardo.....		

Only contestant.

ORDER OF FINISH IN 1946 GOLD CUP REGATTA

1, Guy Lombardo's Tempo VI, 1200 pts.; 2, Gibson Bradfield's Buckeye Baby, 694 pts.; 3, Alan Arena's Miss Golden Gate III, 600 pts.; 4, Robert A. Bogie's Blitz II, 577 pts.; 5, Jos. Blerck's Aljo V, 465 pts.; 6, Jed Hanley's Malt 'N' Hops, 97 pts.

HARMSWORTH TROPHY WINNERS

R.M.Y.C.—Royal Motor Yacht Club. A.C.F.—Automobile Club de France. M.B.C.A.—Motor Boat Club of America. Y.A.A.—Yachtsmen's Association of America.

Year	Winner	Club	Boat and owner	Course	Speed*
1903	England	R.M.Y.C.	NAPIER I, S. F. Edge	Queenstown (Cobh)	19.53
1904	France	A.C.F.	TREFLE-A-QUATRE, E. B. Thurbon	Solent, England	26.63
1905	England	R.M.Y.C.	NAPIER II, S. F. Edge	Arachon, France	26.03
1906	England	R.M.Y.C.	YARROW-NAPIER, Lord Montagu of Beabieu and L. de Rothschilds.	Solent, England	15.48
1907	U. S.	M.B.C.A.	DIXIE I, E. J. Schroeder	Solent, England	31.78
1908	U. S.	M.B.C.A.	DIXIE II, E. J. Schroeder	Huntington Bay, L. I.	31.347
1910	U. S.	M.B.C.A.	DIXIE III, F. K. Burnham	Huntington Bay, L. I.	36.04
1911	U. S.	M.B.C.A.	DIXIE IV, F. K. Burnham	Huntington Bay, L. I.	40.28
1912	England	R.M.Y.C.	MAPLE LEAF IV, E. Mackay Edgar	Huntington Bay, L. I.	43.18
1913	England	R.M.Y.C.	MAPLE LEAF IV, E. Mackay Edgar	Osborne Bay, Eng.	57.45
1920	U. S.	M.B.C.A.	MISS AMERICA I, Garfield A. Wood	Osborne Bay, Eng.	61.51
1921	U. S.	M.B.C.A.	MISS AMERICA II, Garfield A. Wood	Detroit River	59.75
1926	U. S.	Y.A.A.	MISS AMERICA V, Garfield A. Wood	Detroit River	61.118
1928	U. S.	Y.A.A.	MISS AMERICA VII, Garfield A. Wood	Detroit River	59.325
1929	U. S.	Y.A.A.	MISS AMERICA VIII, Garfield A. Wood	Detroit River	75.287
1930	U. S.	Y.A.A.	MISS AMERICA IX, Garfield A. Wood	Detroit River	77.233
1931	U. S.	Y.A.A.	MISS AMERICA VIII, Garfield A. Wood, Jr.	Detroit River	85.8611
1932	U. S.	Y.A.A.	MISS AMERICA X, Garfield A. Wood	Lake St. Clair	78.489
1933	U. S.	Y.A.A.	MISS AMERICA X, Garfield A. Wood	St. Clair River	86.939

*In statute miles per hour.

†First of hydroplanes to win, predecessors being all displacement craft.

‡Lord Charles C. Wakefield of Hythe's MISS ENGLAND I established the heat record of 89.913 statute m.p.h. and the lap record of 93.123 in the first race of the 1931 regatta.

Records for One Mile

Class	Speed, m.p.h.	Date	Place	Boat and owner or driver
Unlimited hydroplane (U. S.)	124.915	9/20/32	Algonac, Mich.	MISS AMERICA X, Gar Wood
Unlimited hydroplane	141.74	8/19/39	Lake Coniston, Eng.	BLUE BIRD II, Sir M. Campbell
Gold Cup supercharged	100.987	10/ 9/40	Detroit, Mich.	NOTRE DAME, H. Mendelson
Gold Cup nonsupercharged	99.884	9/14/41	Cincinnati, Ohio	WHY WORRY, W. E. Cantrell
91-cu.-in. hydroplane	64.685	10/25/41	Salton Sea, Calif.	TOP'S PUP, Jack Cooper
135-cu.-in. hydroplane	80.178	11/17/45	Salton Sea, Calif.	LY BEE, Tom Hill
151-cu.-in. hydroplane limited	65.766	9/20/46	Washington, D. C.	UNCLE SAM I, Edison Hedges
151-cu.-in. hydroplane unlimited	64.40	11/12/33	Salton Sea, Calif.	MISS CALIFORNIA, R. Loynes
225-cu.-in. hydroplane, Div. I.	88.786	10/17/40	Pictou, Ontario	VOODOO, Dave Foreman
225-cu.-in. hydroplane, Div. II.	77.670	5/17/42	Elsinore, Calif.	INVADER, Tommy Ince
Pacific One design	52.346	11/17/45	Salton Sea, Calif.	PUDGY, Elmer Cravener

Records in Competition

Class	Distance	Speed, m.p.h.	Date	Place	Boat and owner or driver
Gold Cup lap	5	61.973	9/ 1/33	Detroit, Mich.	EL LAGARTO, Geo. Reis
Gold Cup heat	30	70.878	9/ 2/46	Detroit, Mich.	TEMPO VI, Guy Lombardo
Gold Cup race	90	68.072	9/ 2/46	Detroit, Mich.	TEMPO VI, Guy Lombardo
Gold Cup lap	3	77.911	9/ 2/46	Detroit, Mich.	MISS GOLDEN GATE III, Dan Arena
British International	30 (n)	89.913	9/ 6/31	Detroit, Mich.	MISS ENGLAND, Kaye Don
British International	5 (n)	93.017	9/ 6/31	Detroit, Mich.	MISS ENGLAND II, Kaye Don
President's Cup lap	2½	74.258	9/22/46	Washington, D. C.	MISS GREAT LAKES, Albin Fallon
President's Cup heat	15	71.181	9/22/46	Washington, D. C.	MISS GREAT LAKES, Albin Fallon
National Sweepstakes	lap	76.923	8/25/40	Red Bank, N. J.	NOTRE DAME, H. Mendelson
National Sweepstakes	heat	76.140	8/25/40	Red Bank, N. J.	NOTRE DAME, H. Mendelson
National Sweepstakes	total race	66.809	8/25/40	Red Bank, N. J.	TOPS III, Jack Cooper
Single engine hydroplane	12 hours	63.17	9/30/29	Lake Roseau, Can.	RAINBOW VIII, H. B. Greening
	723.92 mi.				
Single engine hydroplane	24 hours	50.78	10/23/25	Lake Roseau, Can.	RAINBOW IV, H. B. Greening
	1217.88 mi.				
Aquaplane open sea	41	31.69	1937	Catalina to Hermosa, Calif.	CHRIS-CRAFT, Bob Duntley (rider)

(n) Nautical miles.

The 1947 British tennis championships at Wimbledon will be played during the two weeks starting June 23, according to an announcement from the All-England Lawn Tennis Club.

Bishop Loughlin Memorial High School of Brooklyn and Mercersburg (Pa.) Academy won the 1946 A. A. U. high and preparatory schools indoor track and field championships.

AUTO RACING

THE FIRST automobiles on the road were static in action and driving them or even racing in them was considered a trifle silly, hence it became the sporting thing to do. Experimental excursions in crude cars gave rise to rivalry in speed over the high roads of the Gay Nineties and this eventually led to formal contests, the first of which was a road race from Paris to Bremen in 1894, with 26 cars showing up at the starting line. Formal competition in the United States started with a road race in the Chicago district on Thanksgiving Day, 1895, and the winner, J. F. Duryea, covered the road distance of 54.36 miles at the astonishing average of 7.5 miles per hour! Around 1900 Paris became the hub of auto racing in Europe and each year there were raucous, dusty and dangerous races from Paris to Berlin, to Vienna, to Madrid

and other cities on the Continent. Accidents were so numerous to drivers and spectators that, after a gory group of mishaps in the forepart of the Paris-Madrid race of 1903, the contest was halted at Bordeaux by public authorities and all road racing was brought under control. Other kinds of auto racing were exposed to view. Some contests, including 24-hour races for stock models, were held on circular or oval tracks originally built for horse racing. Finally came the special racing strips for autos, including such famous autodromes as Brooklands in England and the Indianapolis Speedway in the United States.

As a test of engine and chassis under severe conditions and great strain, auto racing rendered invaluable assistance in the development of the motor car of today.

Auto Racing Statistics

Source: Contest Board, American Automobile Association, Washington, D. C.

National A. A. A. Champions

1 R. Mulford	1922 Jimmy Murphy	1933 Louis Meyer
2 R. De Palma	1923 Eddie Hearne	1934 Bill Cummings
3 E. Cooper	1924 Jimmy Murphy	1935 Kelly Petillo
4 R. De Palma	1925 Peter De Paolo	1936 Mauri Rose
5 E. Cooper	1926 Harry Hartz	1937 Wilbur Shaw
6 Dario Resta	1927 Peter De Paolo	1938 Floyd Roberts
7 E. Cooper	1928 Louis Meyer	1939 Wilbur Shaw
8 R. Mulford	1929 Louis Meyer	1940 Rex Mays
9 "Howdy" Wilcox	1930 Billy Arnold	1941 Rex Mays
10 G. Chevrolet	1931 Louis Schneider	1946 Ted Horn*
11 Tommy Milton	1932 Bob Carey	

*Unofficial.

How World Records Are Caught

On the hard sand of the beach at Daytona, Florida, 200 feet wide at low tide, was used for many years as the testing ground for speed. In September 1935, a shift was made to the salt beds near Bonneville, Utah, at the suggestion of T. E. Allen of the Contest Board, American Automobile Association.

At Daytona, there is a 10-mile racing stretch; at Bonneville, a 13-mile strip. Each is marked by a post. The actual test-place is between posts No. 4 and No. 5 at Daytona and between No. 6 and No. 7 at

Bonneville. Drivers use earlier miles to get up speed, the latter ones to slow down.

At posts No. 4 and No. 5 (6 and 7 at Bonneville) are steel timing wires, set a few inches above the ground. The timing apparatus registers as the car passes over both wires and thus the officials arrive at the exact time elapsed between posts. To prevent drivers from taking advantage of a favoring wind no recognition is paid to records made in only one direction. They must drive in both directions, and the average time becomes the official time.

A world record for big-car racing over a half-mile track was set by Elbert Booker of Detroit on July 21, 1946, when he traveled over Funk's Dayton (Ohio) Speedway course in 21.35 seconds. Booker's mark, declared official by James Lamb of the AAA, was made only a few minutes after Spider Webb of Bell, Calif., had lowered the old figure of 21.43 seconds to 21.38.

History of the One-Mile Speed Mark

The first recorded effort for one mile was made in 1898 by Chasseloup-Laubat, driving a Jentaud, in France. His average was 39.23 m.p.h. This was increased to 65.79 in 1899 by Jenatzky, also in France. The first man to travel better than 100 m.p.h. was Rigolly, in 1904, at 103.56 m.p.h., followed

by Baras, with 104.53 in the same year. The first over 200 m.p.h. was Major H. O. D. Segrave, who drove at 203.790 in 1927 at Daytona, Florida. Those who drove 300 m.p.h. or better follow (all at Bonneville, Utah):

Date	Driver	Car	Average
Sept. 3, 1935	Sir Malcolm Campbell	Bluebird Special	301.1292
Sept. 3, 1935	Sir Malcolm Campbell	Bluebird Special	301.13
Nov. 19, 1937	Capt. G. E. T. Eyston	Thunderbolt #1	311.42
Aug. 27, 1938	Capt. G. E. T. Eyston	Thunderbolt #1	345.5
Sept. 15, 1938	John Cobb	Railton	350.2
Sept. 16, 1938	Capt. G. E. T. Eyston	Thunderbolt #1	357.5
Aug. 23, 1939	John Cobb	Railton Red Lion	368.9

Indianapolis Speedway Winners (500-mile race)

Year	Winner	Car	Second	Third	Time	Average
1911	Harroun	Marmon	Mulford	Bruce-Brown	6:42:08	74.59
1912	Dawson	National	Tetzloff	Hughes	6:21:08	78.70
1913	Goux	Peugeot	Wishart	Merz	6:35:05	76.92
1914	Thomas	Delarge	Duray	Guyot	6:03:45	82.47
1915	De Palma	Mercedes	Resta	Anderson	5:33:55	89.84
1916*	Resta	Peugeot	De Aleve	Mulford	3:34:17	83.26
1917-18	No races					
1919	Wilcox	Peugeot	Hearne	Goux	5:40:42	88.06
1920	Chevrolet	Monroe	Thomas	Milton	5:38:32	88.50
1921	Milton	Frontenac	Sarles	Ford	5:34:44	89.62
1922	Murphy	Murphy Special	Hartz	Hearne	5:17:30	94.48
1923	Milton	H. G. S. Special	Hartz	Murphy	5:29:50	90.95
1924	Corum-Boyer	Duesenberg Special	Cooper	Murphy	5:05:23	98.23
1925	De Paolo	Duesenberg Special	Lewis	Shafer	4:56:39	101.13
1926†	Lockhart	Miller Special	Hartz	Woodbury	4:10:17	95.88
1927	Souders	Duesenberg	Devore	Gulatta	5:07:33	97.54
1928	Meyer	Miller Special	Moore	Souders	5:01:33	99.48
1929	Keech	Simplex Special	Meyer	Gleason	5:07:25	97.58
1930	Arnold	Hartz-Miller	Cantlon	Schneider	4:58:39	100.488
1931	Schneider	Bowes Special	Frame	Hepburn	5:10:28	96.629
1932	Frame	Miller Special	Wilcox	Bergere	4:48:03.79	104.144
1933	Meyer	Miller Special	Shaw	Moore	4:48:12.75	104.089
1934	Cummings	Miller Special	Rose	Moore	4:46:05.20	104.863
1935	Petillo	Gilmore Special	Shaw	Cummings	4:42:22.71	106.240
1936	Meyer	Ring Free Special	Horn	Mackenzie	4:35:03.39	109.069
1937	Shaw	Shaw-Gilmore Spl.	Hepburn	Horn	4:24:07.80	113.580
1938	Roberts	Burd Piston Reg. Spl.	Shaw	Miller	4:15:58.40	117.200
1939	Shaw	Boyle Special	Snyder	Bergere	4:20:47.39	115.035
1940	Shaw	Boyle Special	Mays	Rose	4:22:31.17	114.277
1941	Rose-Davis†	Noc-Out Hose Clamp Special	Mays	Horn	4:20:36.24	115.117
1942-45	No races					
1946	Robson	Thorne Eng. Spl.	Jackson	Horn	4:21:16.71	114.820

*300 miles.

†Race ended at 400 miles owing to heavy rain.

‡Davis drove 180 miles, Rose 320.

LEADING FINISHERS IN 1946 INDIANAPOLIS RACE

Driver	Home city	Time	Average m. p. h.
George Robson	Los Angeles	4:21:16.71	114.820
Jimmy Jackson	Palm Springs, Calif.	4:22:00.74	114.498
Ted Horn	Paterson, N. J.	4:33:10.51	109.820
Emil Andres	Chicago	4:35:28.65	108.902
Sam Hanks	Chicago	4:36:45.29	108.399
Joie Chitwood	Reading, Pa.		
Lewis Durant	Burbank, Calif.	4:45:30.88	105.073

FENCING

Source: Amateur Fencers League of America.

NATIONAL CHAMPIONS

Foil	Épée	Saber	Women's foil
W. S. O'Connor	B. F. O'Connor	R. O. Haubold	
W. T. Heintz	G. M. Hammond	G. M. Hammond	
C. G. Bothner	R. O. Haubold	G. M. Hammond	
A. V. Z. Post	C. G. Bothner	C. G. Bothner	
G. Kavanaugh	A. V. Z. Post	C. G. Bothner	
C. G. Bothner	C. G. Bothner	C. G. Bothner	
No competition			
G. Kavanaugh	M. Diaz	G. Kavanaugh	
F. Townsend	W. D. Lyon	J. L. Erving	
C. Tatham	C. Tatham	A. V. Z. Post	
J. P. Parker	C. Tatham	A. V. Z. Post	
F. Townsend	C. Tatham	A. V. Z. Post	
C. G. Bothner	C. G. Bothner	A. G. Anderson	
C. G. Bothner	W. S. O'Connor	K. B. Johnson	
S. D. Breckinridge	W. Grebe	A. G. Anderson	
C. Waldbott	W. D. Lyon	A. G. Anderson	
W. L. Bowman	P. Benzenberg	G. W. Postgate	
O. A. Dickinson	A. De La Poer	A. E. Sauer	
G. K. Bainbridge	A. De La Poer	J. T. Shaw	
G. H. Breed	G. H. Breed	A. G. Anderson	
S. Hall	A. V. Z. Post	C. A. Bill	A. Baylis
P. J. Meylan	A. E. Sauer	A. G. Anderson	Mrs. W. H. Dewar
S. D. Breckinridge	F. W. Allen	W. Von Blijenburgh	M. Stimson
O. A. Dickinson	J. A. MacLaughlin	S. Hall	J. Pyle
A. E. Sauer	W. H. Russell	S. Hall	Mrs. C. H. Woorhees
S. Hall	L. G. Nunes	A. S. Lyon	F. Walton
No competition			
S. Hall	W. H. Russell	A. S. Lyon	No competition
S. Hall	R. W. Dutcher	S. Hall	A. Gehrig
F. W. Honeycutt	C. R. McPherson	C. R. McPherson	A. Gehrig
H. M. Raynor	L. G. Nunes	L. G. Nunes	A. Gehrig
R. Peroy	G. C. Calnan	L. M. Schoonmaker	A. Gehrig
L. G. Nunes	L. G. Nunes	J. E. Gignoux	Mrs. C. H. Hopper
G. C. Calnan	W. H. Russell	J. Vince	Mrs. L. M. Schoonmaker
G. C. Calnan	L. G. Nunes	L. G. Nunes	Mrs. L. M. Schoonmaker
G. C. Calnan	H. Van Buskirk	N. Muray	S. Stern
G. C. Calnan	L. G. Nunes	N. Muray	M. Lloyd
J. L. Lewis	F. S. Rigueimer	L. G. Nunes	Mrs. L. M. Schoonmaker
G. C. Calnan	M. Pasche	N. C. Armitage	Mrs. H. Van Buskirk
G. C. Calnan	M. A. de Capriles	J. R. Huffman	M. Lloyd
J. L. Lewis	L. G. Nunes	J. R. Huffman	D. Locke
J. L. Lewis	G. M. Heiss	J. R. Huffman	D. Locke
H. V. Alessandroni	G. M. Heiss	N. C. Armitage	H. Mayer
J. L. Lewis	T. J. Sands	N. C. Armitage	H. Mayer
H. V. Alessandroni	G. M. Heiss	N. C. Armitage	Mrs. J. de Tuscan
J. L. Lewis	T. J. Sands	J. R. Huffman	H. Mayer
D. Every	J. R. de Capriles	J. R. Huffman	H. Mayer
N. Lewis	L. Tingley	N. C. Armitage	H. Mayer
D. Every	F. Seibert	N. C. Armitage	H. Mroczkowska
D. Cetrulo	G. M. Heiss	N. C. Armitage	H. Mayer
W. Dow	H. Santos	N. C. Armitage	H. Mayer
W. Dow	R. Driscoll	N. C. Armitage	H. Mroczkowska
A. Snyder	M. A. de Capriles	T. Nyilas	M. Dalton
D. Every	M. Gilman	N. C. Armitage	M. Cerra
J. R. de Capriles	A. Wolfe	T. Nyilas	H. Mayer

National Baseball Congress Champions

Source: Ray Dumont, Wichita, Kansas.

1935—Bismarck (N. D.) Corwin-Churchill
 1936—Duncan (Okla.) Halliburtons
 1937—Enid (Okla.) Eason Oilers
 1938—Buford (Ga.) Bona Allens
 1939—Duncan (Okla.) Halliburtons
 1940—Enid (Okla.) Champlins

1941—Enid (Okla.) Champlins
 1942—Wichita (Kans.) Boeing Bombers
 1943—Camp Wheeler (Ga.) Spokes
 1944—Sherman Field (Kans.) Flyers
 1945—Enid (Okla.) Army Air Field
 1946—St. Joseph (Mich.) Autos

ARCHERY

ARCHERY goes back through song and story and classic legend to the primeval days when bows and arrows were means of obtaining food and also weapons in warfare, but the invention of gunpowder in the 14th Century brought about a complete change in the hunting field and in the ranks of war. Archery survived only as a sport. One of the oldest annual sporting events in England is the archery contest for "The Ancient Scorton Arrow" (a little silver dart) that has been held each year in Yorkshire since 1673. The tradition

of archery survived in many European countries and many tournaments were held each year until World War II obliterated them. The American Indians, of course, used the bow and arrow until guns came into their hands through early explorers and settlers. Organized archery as a sport in the United States began with the formation of a club called the United Bowmen of Philadelphia in 1828. The sport languished through the Civil War period but was revived by the formation of the National Archery Association in 1878.

Archery Statistics

Source: Louis C. Smith, Secretary, National Archery Association of the United States.

NATIONAL RECORDS

Target Shoot

MEN

Year	Event	Record holder	Score
1941	Single York round	Larry Hughes, Burbank, Calif.	141-827
1941	Double York round	Larry Hughes, Burbank, Calif.	279-1637
1941	Single American round	Larry Hughes, Burbank, Calif.	90-744
1941	Double American round	Larry Hughes, Burbank, Calif.	180-1464

WOMEN

1941	Single National round	Mildred E. Miller, Milwaukee, Wis.	72-522
1946	Double National round	Ann Weber, Bloomfield, N. J.	142-1026
1941	Single Columbia round	Ree D. Detrickson, Summit, N. J.	72-584
1946	Double Columbia round	Ann Weber, Bloomfield, N. J.	143-1159

Flight Shoot

(All records made in 1946)

MEN

Class	Event	Record holder	Distance
Class 1	Bows up to and including 50 pounds weight	Mike Humbert, Springfield, Ohio	468 yd. 2 ft.
Class 2	Bows up to and including 65 pounds weight	Mike Humbert, Springfield, Ohio	504 yd. 1 ft. 8 in.
Class 3	Bows up to and including 80 pounds weight	Charles Pierson, Cincinnati, Ohio	511 yd. 2 ft. 3 1/2 in.
Class 4	Bows of all weights	Herb Henderson, Evansville, Ind.	521 yd. 11 in.
Free-style shooting		Charles Pierson, Cincinnati, Ohio	658 yd. 2 ft. 8 in.

WOMEN

Class 1	Bows up to and including 35 pounds weight	Mrs. Jack Stewart, Austin, Texas	383 yd.
Class 2	Bows up to and including 50 pounds weight	Millie Hill, Dayton, Ohio	432 yd. 2 ft. 3 in.
Class 3	Bows of all weights	Millie Hill, Dayton, Ohio	434 yd. 10 in.
Free-style shooting		Mrs. Cecil Modlin, Evansville, Ind.	564 yd. 6 in.

DOG SHOWS

Source: The American Kennel Club.

Morris and Essex Kennel Club Exhibition

(Madison, New Jersey)

	Best in show	Breed	Owner
7	Ch. Higgins' Red Pat.	Irish setter	William W. Higgins
8	Ch. Delf Discriminate of Pinegrade	Sealyham terrier	Pinegrade Kennels
9	Ch. Little Emir	Pomeranian	Mrs. V. Matta
10	Ch. Weltona Frizzette of Wildoaks	Fox terrier, wire	Mr. and Mrs. R. C. Bondy
11	Ch. Fionne v Loheland of Walnut Hall	Great dane	Harkness Edwards
12	Ch. Lone Eagle of Earlsmoor	Fox terrier, wire	Dr. and Mrs. S. Milbank
13	Eppingeville of Blarney	Fox terrier, wire	John G. Bates
14	Ch. Gunside Babs of Hollybourne	Sealyham terrier	S. L. Froelich
15	Ch. Milson O'Boy	Irish setter	Mrs. Cheever Porter
16	Ch. Mr. Reynal's Monarch	Harrier	Amory L. Haskell
17	Ch. Sturdy Max	English setter	Maridor Kennels
18	Ch. Ideal Weather	Old English sheep dog	Leonard Collins
19	Ch. My Own Brucie	Cocker spaniel	H. E. Mellenthin
20	Ch. Blakeen Jung Frau	Poodle, standard	Blakeen Kennels
21	Ch. Nornay Saddler	Fox terrier, smooth	Wissaboo Kennels
22-45	No shows		
46	Ch. Benbow's Beau	Cocker spaniel	Robert A. Gusman

Westminster Kennel Club Exhibition

(Madison Square Garden, New York, N. Y.)

	Best in show	Breed	Owner
7	Ch. Warren Remedy	Fox terrier, smooth	Winthrop Rutherford
8	Ch. Warren Remedy	Fox terrier, smooth	Winthrop Rutherford
9	Ch. Warren Remedy	Fox terrier, smooth	Winthrop Rutherford
10	Ch. Sabine Rarebit	Fox terrier, smooth	Sabine Kennels
11	Ch. Tickle Em Jock	Scottish terrier	A. Albright, Jr.
12	Ch. Kenmore Sorceress	Airedale terrier	William P. Wolcott
13	Ch. Strathway Prince Albert	Bulldog	Alex H. Stewart
14	Ch. Brentwood Hero	Old English sheep dog	Mrs. Tyler Morse
15	Ch. Matford Vic	Fox terrier, wire	George W. Quintard
16	Ch. Matford Vic	Fox terrier, wire	George W. Quintard
17	Ch. Conejo Wycollar Boy	Fox terrier, wire	Mrs. Roy A. Rainey
18	Ch. Haymarket Faultless	Bull terrier	R. H. Elliot
19	Ch. Briergate Bright Beauty	Airedale terrier	G. L. L. Davis
20	Ch. Conejo Wycollar Boy	Fox terrier, wire	Mrs. Roy A. Rainey
21	Ch. Midkiff Seductive	Cocker spaniel	William T. Payne
22	Ch. Boxwood Barkentine	Airedale terrier	Frederic C. Hood
23	No best in show award		
24	Ch. Barberryhill Bootlegger	Sealyham terrier	Bayard Warren
25	Ch. Governor Moscow	Pointer	Robert F. Maloney
26	Ch. Signal Circuit	Fox terrier, wire	Halleston Kennels
27	Ch. Pinegrade Perfection	Sealyham terrier	Frederic C. Brown
28	Ch. Talavera Margaret	Fox terrier, wire	R. M. Lewis
29	Land Loyalty of Bellhaven	Collie	Mrs. Florence B. Ilch
30	Ch. Pendley Calling of Blarney	Fox terrier, wire	John G. Bates
31	Ch. Pendley Calling of Blarney	Fox terrier, wire	John G. Bates
32	Ch. Nancolth Markable	Pointer	Giralda Farms
33	Ch. Warland Protector of Shelterock	Airedale terrier	S. M. Stewart
34	Ch. Flornell Spicy Bit of Halleston	Fox terrier, wire	Halleston Kennels
35	Ch. Nunsoe Duc de la Terrace of Blakeen	Poodle	Blakeen Kennels
36	Ch. St. Margaret Magnificent of Clairedale	Sealyham terrier	Clairedale Kennels
37	Ch. Flornell Spicy Piece of Halleston	Fox terrier, wire	Halleston Kennels
38	Daro of Maridor	English setter	Maridor Kennels
39	Ferry v. Raufhelsen of Giralda	Doberman pinscher	Giralda Farms
40	Ch. My Own Brucie	Cocker spaniel	H. E. Mellenthin
41	Ch. My Own Brucie	Cocker spaniel	H. E. Mellenthin
42	Ch. Wolvey Pattern Edgerstone	West Highland terrier	Mrs. John G. Winant
43	Ch. Pitter Patter of Piperscroft	Miniature poodle	Mrs. P. H. B. Frelinghuysen
44	Ch. Flornell Rare-Bit of Twin Ponds	Welsh terrier	Mrs. Edward P. Alker
45	Shieling's Signature	Scottish terrier	Mr. and Mrs. T. H. Sneathen
46	Ch. Hetherington Model Rhythm	Fox terrier, wire	Mr. and Mrs. T. H. Carruthers III

BILLIARDS

APPARENTLY nobody knows where billiards originated. Some trace the game back to ancient Greece or early Egyptian days; others insist it originated in France or England in medieval times. Shakespeare must have believed the Egyptian tale, because in *Antony and Cleopatra* he has Cleopatra saying: "Let's to billiards; come, Charmian." There is an illustration of Louis XIV of France playing billiards in 1694 and using a shovel-shaped stick to set the "cue ball" in motion, from which it is evident that the pointed cue was a later development.

Certainly the game was popular in England and on the Continent in the 17th

and 18th Centuries and early settlers in North America are supposed to have introduced the game here. How to apply "english" to a billiard ball was discovered by Jack Carr, an Englishman, in 1820. A Frenchman named Mingaud is credited with having invented the "draw" shot about the same time and also to have devised leather tips for wooden cues. Championship competition, amateur and professional, is a modern development in billiards. The first formal professional tournament held in the United States took place in New York in 1863 with eight players competing. The first three-cushion tournament was held in St. Louis in 1876.

Billiards Statistics

Source: Chas. C. Peterson, President, Billiard Association of America.

World 18.2 Balk-line Champions

1903-05 Maurice Vignaux	1909 Ora C. Morningstar	1925 Jake Schaefer, Jr.
1906 George F. Slosson	1909 Calvin Demarest	1926 Erich Hagenlacher
1906-07 George B. Sutton	1910 Harry P. Cline	1927 Welker Cochran
1907 Willie Hoppe	1910-20 Willie Hoppe	1928 Edward Horemans
1907 Jacob Schaefer, Sr.	1921-22 Jake Schaefer, Jr.	1929-33 Jake Schaefer, Jr.
1908 George F. Slosson	1923-24 Willie Hoppe	1934-46 Welker Cochran
1908 George B. Sutton	1925 Edward Horemans*	

*Disputed match. Schaefer won play-off.

18.2 BALK-LINE RECORDS

Year	Holder	Points	Year	Holder	Points	
1925	Jake Schaefer, Jr.	High run (game).....	400	1925	Jake Schaefer, Jr.	High grand average match... 93
1925	Jake Schaefer, Jr.	High run match.....	432	1926	Jake Schaefer, Jr.	High run exhibition match... 5
1925	Jake Schaefer, Jr.	High average.....	400	1926	Jake Schaefer, Jr.	High grand average 2400 pts. 7
1925	Jake Schaefer, Jr.	High grand average tournament.....	57.14	1926	Welker Cochran	High run exhibition..... 6

World 18.1 Balk-line Champions

1903-05 Maurice Vignaux	1908 George B. Sutton*	1913 Ora C. Morningstar
1906 Willie Hoppe	1908 George F. Slosson	1914-26 Willie Hoppe
1907 George B. Sutton	1909-11 Willie Hoppe	1926-27 Jake Schaefer, Jr.
1907 Willie Hoppe	1912 George B. Sutton	1927-46 Willie Hoppe
1908 Jacob Schaefer, Sr.		

*By forfeit.

18.1 BALK-LINE RECORDS

Year	Holder	Points	Year	Holder	Points
1926	Jake Schaefer, Jr.	High run in match play.....	212	1927	Welker Cochran...High run in exhibition.....
1926	Jake Schaefer, Jr.	High single average in match play.....	60	1927	Welker Cochran...High single average in exhibition.....
1926	Jake Schaefer, Jr.	High grand average in match play.....	36	1927	Welker Cochran...High grand average in exhibition.....

Maurice Vignaux of France won the first world 18.2 billiard tournament, which was played in Paris in 1903. George F. Slosson and George B. Sutton, representing the United States, competed against Vignaux, who was awarded the championship by a decision based on grand averages.—*Encyc. Brit.*

World Three-cushion Champions

1878	Leon Magnus	1915	William H. Huey	1926-27	Otto Reiselt
1899	W. H. Catton	1916	Alfredo DeOro	1927	Augie Kieckhefer
1900	Eugene Carter	1916	Charles Ellis	1928	Otto Reiselt
1900	Lloyd Jevne	1916	Charles McCourt	1928-29	John Layton
1907	Harry P. Cline	1916	Hugh Heal	1930	John Layton
1908	John Daly	1916	George Moore	1931	Arthur Thurnblad
1908	Thomas Hueston	1917	Charles McCourt	1932	Augie Kieckhefer
1908-09	Alfredo DeOro	1917	R. L. Cannafax	1933	Welker Cochran
1910	Fred Eames	1917-18	Alfredo DeOro	1934	John Layton
1910	Alfredo DeOro	1918-19	Augie Kieckhefer	1935	Welker Cochran
1910	John Daly	1919	Alfredo DeOro	1936	Willie Hoppe
1910	Thomas Hueston	1919	R. L. Cannafax	1937	Welker Cochran
1911	John Daly	1920	John Layton	1938	Welker Cochran
1911	Alfredo DeOro	1921	Augie Kieckhefer	1939	Joe Chamaco
1912	Joe Carney	1921-23	John Layton	1940-44	Willie Hoppe
1912	John Horgan	1923	Tiff Denton	1944	Welker Cochran
1913-14	Alfredo DeOro	1924	R. L. Cannafax	1945-46	Welker Cochran
1915	George Moore	1925	R. L. Cannafax		

THREE-CUSHION RECORDS

High Runs

High Averages—Best Game

Year	Holder	Event	Points	Year	Holder	Points	Event
1915	Charles Morin	Tournament (Pro)	18	1925	Otto Reiselt	50 in	16 innings Interstate League
1919	Tiff Denton	Tournament (World)	17	1925	Otto Reiselt	100 in	57 innings Interstate League
1926	John Layton	Interstate League	18	1925	Otto Reiselt	150 in	104 innings Interstate League
1927	Willie Hoppe	American League	20	1930	John Layton	50 in	23 innings Tournament
1928	Willie Hoppe	Exhibition vs. C. C. Peterson	25	1939	Joe Chamaco	50 in	23 innings National League*
1930	Gus Copulos	Tournament (World)	17	1940	Jay N. Bozeman	50 in	23 innings Tournament†
1936	Willie Hoppe	Match play	15	1945	Willie Hoppe	50 in	20 innings Tournament†
1939	Joe Chamaco	National League*	18	1945	Welker Cochran	60 in	20 innings Match
1940	Tiff Denton	Tournament†	17				
1945	Willie Hoppe	Match play†	20				

*No safeties. †Safeties. ‡No safeties; optional cue ball first shot of inning.

*No safeties. †Safeties. ‡No safeties; optional cue ball first shot of inning.

World Pocket Billiard Champions

1878-80	Cyrille Dion	1903	Alfredo DeOro	1926	Erwin Rudolph
1881	Gottlieb Wahlstrom	1904	Alfredo DeOro	1926	Thomas Hueston
1882-83	Albert Frey	1905	Jerome Keogh (f)	1927	Frank Taberski
1884	J. L. Malone	1905	Alfredo DeOro	1927-28	Ralph Greenleaf
1886-87	Albert Frey	1905	Thomas Hueston (f)	1928	Frank Taberski
1887	J. L. Malone (f)	1906	Thomas Hueston	1929	Ralph Greenleaf
1887-88	Alfredo DeOro	1906	John Horgan	1929	Frank Taberski
1888	Frank Powers	1906	Jerome Keogh	1930	Erwin Rudolph
1889	Albert Frey	1907	Thomas Hueston	1930-32	Ralph Greenleaf
1889	Alfredo DeOro	1908	Thomas Hueston	1933-34	Erwin Rudolph
1890	H. Manning	1908	Frank Sherman	1935	Andrew Ponzi
1891	Frank Powers (f)	1908	Alfredo DeOro	1936	James Caras
1892-94	Alfredo DeOro	1909	Charles Weston	1937	Ralph Greenleaf
1895	William Clearwater	1909	John Kling	1938	James Caras
1895	Alfredo DeOro	1910	Thomas Hueston	1939	James Caras
1896	Frank Stewart (f)	1910	Jerome Keogh	1940	Andrew Ponzi (l)
1897	Grant Eby	1910-12	Alfredo DeOro	1941	Willie Mosconi (l)
1897	Jerome Keogh	1912	R. J. Ralph	1941	Erwin Rudolph (t)
1898	William Clearwater	1913	Alfredo DeOro	1942	Irving Crane (m)
1898	Jerome Keogh	1913-15	Bennie Allen	1942	Willie Mosconi (t)
1899-1900	Alfredo DeOro	1916	John Layton	1943	Andrew Ponzi (m)
1901	Frank Sherman	1916-18	Frank Taberski	1944	Willie Mosconi (m)
1901	Alfredo DeOro	1919-24	Ralph Greenleaf	1945	Willie Mosconi
1902	William Clearwater	1925	Frank Taberski	1946	Willie Mosconi
1902	Grant Eby	1926	Ralph Greenleaf	1946	Irving Crane (t)

(f) Forfeit. (l) League play. (t) Tourney. (m) Match.

Michael Phelan won a \$15,000 stake and the American billiard championship by defeating John Seereiter, 2000 points to 1904, at Detroit in April 1859.

Cyrille Dion won the first national championship pocket billiard tournament in this country, the event taking place in New York City from April 8 to 20, 1878.

National Amateur 18.2 Balk-line Champions

1909—H. A. Wright
1910—E. W. Gardner
1911—J. F. Poggenburg
1912—M. D. Brown
1913—Joseph Mayer
1914—E. W. Gardner
1915—Nathan Hall
1916—C. Huston
1917—Dave McAndless

1918—Percy Collins
1919—C. Heddon
1920—E. T. Appleby
1921—Percy Collins
1922—E. T. Appleby*
1923—Percy Collins†
1924—E. T. Appleby
1925—F. S. Appleby
1926-28—John Clinton

1929—E. T. Appleby‡
1929—Percy Collins‡
1929—M. C. Walgren‡
1930—Percy Collins
1931—E. T. Appleby
1932—Albert Poensgen§
1933—Albert Poensgen§
1934-40—Edmund Sousa

*International champion. †National 18.1 champion—F. S. Appleby. ‡Amateur Billiard Association. §International champion.

National Amateur Three-cushion Champions

1910—Pierre Maupome
1911—Charles Morin
1919—Arthur Newman
1920—W. B. Huey
1921—Earl Lookabaugh
1922—Frank Flemming
1923—Robert M. Lord
1924—Frank Flemming

1925-26—Dr. A. J. Harris
1927—Dr. L. P. Macklin
1928—J. N. Bozeman
1929—Charles Jordan
1929—Max Shimon
1930—Joseph Hall
1930—Max Shimon
1930—R. B. Harper

1931—Frank Flemming
1931-35—Edward Lee
1936—Edward Lee*
1937—A. Primeau
1938—Gene Deardorff
1939-45—Gene Deardorff
1945-46—C. T. Vandover
1946—Edward Lee

*World champion.

National Amateur Pocket Billiard Champions

1912—A. Hyman
1913—J. H. Shoemaker
1914—No tournament
1915-22—J. H. Shoemaker
1923—E. F. Reynolds
1924—J. H. Shoemaker
1925—Carl A. Vaughan

1926—Clarence Hurd
1927—J. H. Shoemaker
1928—J. Collins
1929—Cy. Yellin
1930—J. H. Shoemaker
1931—Robert Cole
1931—J. H. Shoemaker*

1932—E. Fagin
1932—J. H. Shoemaker*
1933—E. Fagin
1933—J. H. Shoemaker*
1934-35—J. H. Shoemaker
1936-37—E. C. Rogers
1938-40—Arthur Cranfield

*By challenge.

TRAPSHOOTING

Source: *Sports Afield*, 401-05 Second Ave. So., Minneapolis 1, Minn.

Grand American Tournament Winners, 1946

(Vandalia, Ohio, Aug. 19 to 24)

Event	Winner and home city	Score
Grand American handicap	Capt. Frank Bennett, Miami, Fla.	98x100
Women's Grand American	Mrs. Roy Meadows, Grimes, Iowa	94x100
Grand American preliminary	Albert Peterson, Virginia, Ill.	97x100
Women's Grand American preliminary	Ruth Cuthbert, Winchester, Va.	95x100
Open championship	Vic Reinders, Waukesha, Wis.	199x200
Champion of champions	Vic Reinders, Waukesha, Wis.	100x100
North American championship	Walter Beaver, Conshohocken, Pa.	199x200
Women's championship	Rose Palmer, Chicago, Ill.	95x100
Women's champion of champions	Ruth Knuth, Indianapolis, Ind.	96x100
Father and son	Homer Clark, Sr.—Homer Clark, Jr. Alton, Ill.	194x200
Husband and wife	Mr. and Mrs. Clyde King, Atlanta, Ga.	190x200
Veterans' championship	John W. Bradrick, Richmond, Ind.	97x100
Junior championship	Fred Faldock, Sandusky, Ohio	95x100
Sub-Junior championship	Raymond Vogel, Willard, Ohio	92x100
Sports Afield ex-servicemen's event	E. Gray Lancaster, Spartanburg, S. C.	97x100
State team race	Illinois Team	488x500
Class AA	Vic Reinders, Waukesha, Wis.	100x100
Class A	J. D. Rogers, Greenwood, S. C.	100x100
Class B	Paul Butterbaugh, Lancaster, Ohio	100x100
Class C	H. Edwards, Colton, S. D.	99x100
Class D	Jack Hughes, Jr., Fall River, Mass.	99x100
Grand American doubles	Mercer Tennille, Shreveport, La.	96x100
Vandalia open	Jim Gordon, Mt. Orab, Ohio	94x100
All-around championship	Joe Heistand, Hillsboro, Ohio	763x800
Women's doubles	Rose Palmer, Chicago, Ill.	73x100

BOWLING

THE GAME OF bowling that is the favorite sport of millions of "keglers" in the United States is an indoor modification of the more ancient outdoor game that survives as lawn bowling. The outdoor game is prehistoric in origin and probably goes back to Primitive Man and round stones that were rolled at some target. It is believed that a game something like nine-pins was popular among the Dutch, Swiss and Germans as long ago as 1200 A. D., at which time the game was played outdoors with an alley consisting of a single plank 12 to 18 inches wide along which was rolled a ball toward three rows of three pins each placed at the far end of the alley. When the first indoor alleys were built and how the game was modified from time to time are matters of dispute. Much of the confusion arises from a lack of certainty as to which game is meant, "bowls" or "bowling", one with a "jack" and the other with "pins", in historical passages.

It is supposed that the early settlers of New Amsterdam (New York City) being Dutch, they brought their two bowling games with them. About a century ago the game of nine-pins was flourishing in the United States but so corrupted by gambling on matches that it was barred by law in New York and Connecticut. Since the law specifically barred "nine-pins", it was eventually evaded by adding another pin and thus legally making it a new game. The genius who thought up that simple method of outwitting the law and putting a popular game in motion once more remained modestly anonymous. With the increase in the number of pins, the old diamond formation of nine-pins was abandoned for the triangle set-up of ten-pins that remains the rule to this day. Various organizations were formed to make rules for bowling and supervise competition in the United States but none was successful until the American Bowling Congress, organized Sept. 9, 1895, became the ruling body.

Bowling Statistics

Source: Eli Whitney, Public Relations Director, American Bowling Congress.

American Bowling Congress Records

Type of record	Holder	Score	Year
High team total	Birk Bros., Chicago	3234	1938
High team game	Tea Shop, Milwaukee	1186	1927
High doubles total	G. Zunker—F. Benkovic, Milwaukee	1415	1933
High doubles game	J. Gworek—H. Kmidowski, Buffalo	544	1946
High singles total	Larry Shotwell, Covington, Ky.	774	1930
High all events total	Max Stein, Belleville, Ill.	2070	1937
High 3 games in any event	Larry Shotwell, Covington, Ky.	774	1930

AMERICAN BOWLING CONGRESS CHAMPIONS

Year	Singles	Score	Doubles	Score
1929	Ad Unke, Milwaukee, Wis.	728	W. Klecz—P. Butler, Chicago, Ill.	1353
1930	Larry Shotwell, Covington, Ky.	774	J. Devine—G. Heup, Beloit, Mich.	1339
1931	Walter Lachowski, Erie, Pa.	712	E. Rafferty—C. Reilly, Philadelphia, Pa.	1316
1932	Otto Nitschke, Cleveland, Ohio	731	F. Benkovic—C. Daw, Milwaukee, Wis.	1358
1933	Earl Hewitt, Erie, Pa.	724	G. Zunker—F. Benkovic, Milwaukee, Wis.	1415
1934	Jerry Vidro, Grand Rapids, Mich.	721	G. Rudolph—J. Ryan, Waukegan, Ill.	1321
1935	Don Brokaw, Canton, Ohio	733	C. Summerix—H. Souers, Akron, Ohio	1348
1936	Charles Warren, Springfield, Ill.	735	A. Slanina—M. Straka, Chicago, Ill.	1347
1937	Gene Gagliardi, Mt. Vernon, N. Y.	749	V. Gibbs, Kansas City, Mo.—N. Burton, Dallas, Texas	1359
1938	Knute Anderson, Moline, Ill.	746	D. Johnson—F. Snyder, Indianapolis, Ind.	1337
1939	Jim Danek, Forest Park, Ill.	730	P. Icuss—M. Fowler, Steubenville, Ohio	1405
1940	Ray Brown, Terre Haute, Ind.	742	H. Freitag—J. Sinke, Chicago, Ill.	1346
1941	Fred Ruff, Belleville, Ill.	745	W. Lee—R. Farness, Madison, Wis.	1346
1942	John Stanley, Cleveland, Ohio	756	E. Nowicki—G. Baier, Milwaukee, Wis.	1377
1946	Leo Rollick, Los Angeles, Calif.	737	J. Gworek—H. Kmidowski, Buffalo, N. Y.	1360

American Bowling Congress Champions (cont.)

Year	All-events	Score	Team	Score
1929	Otto Stein, Jr., St. Louis, Mo.....	1974	Hub Recreation, Joliet, Ill.....	3063
1930	George Morrison, Chicago, Ill.....	1985	Graff & Son, Kalamazoo, Mich.....	3100
1931	Mike Mauser, Youngstown, Ohio.....	1966	S & L Motor, Chicago, Ill.....	3013
1932	Hugh Stewart, Cincinnati, Ohio.....	1980	Jefferson Clothiers, Dayton, Ohio.....	3108
1933	Gil Zunker, Milwaukee, Wis.....	2060	Flaig Opticians, Covington, Ky.....	3021
1934	Walt Reppenhausen, Detroit, Mich.....	1972	Strohs, Detroit, Mich.....	3089
1935	Ora Mayer, San Francisco, Calif.....	2022	Wolfe Tire Service, Niagara Falls, N. Y.....	3029
1936	John Murphy, Indianapolis, Ind.....	2006	Falls City Hi-Bru, Indianapolis, Ind.....	3089
1937	Max Stein, Belleville, Ill.....	2070	Krakov Furniture, Detroit, Mich.....	3118
1938	Don Beatty, Jackson, Mich.....	1978	Birk Bros., Chicago, Ill.....	3234
1939	Joe Wilman, Chicago, Ill.....	2028	Fife Electric, Detroit, Mich.....	3151
1940	Fred Fisher, Buffalo, N. Y.....	2001	Monarch Beer, Chicago, Ill.....	3047
1941	Harold Kelly, South Bend, Ind.....	2013	Vogel Bros., Forest Park, Ill.....	3065
1942	Stan Moskal, Saginaw, Mich.....	1973	Budweiser, Chicago, Ill.....	3131
1946	Joe Wilman, Chicago, Ill.....	2054	Llo-da-mar Bowl, Santa Monica, Calif.....	3023

WOMEN'S INTERNATIONAL BOWLING CONGRESS CHAMPIONS

Source: Emma Phaler, Secretary, Women's International Bowling Congress, Inc.

Year	Singles	Score	Doubles	Score
1929	Mrs. Agnes Higgins, Chicago.....	637	M. Smith—D. McQuade, Chicago.....	1123
1930	Anita Rump, Fort Wayne.....	613	F. Trettin—M. Warmbier, Chicago.....	1173
1931	Mrs. Myrtle Schulte, St. Louis.....	650	D. Baker—G. Pomeroy, Detroit.....	1145
1932	Audrey McVay, Kansas City, Mo.....	668	M. Frank—E. Kirg, Chicago.....	1218
1933	Mrs. Sally Twyford, Aurora, Ill.....	628	V. Peters—M. Kite, Syracuse, N. Y.....	1135
1934	Marie Clemensen, Chicago.....	712	F. Trettin—D. McQuade, Chicago.....	1190
1935	Marie Warmbier, Chicago.....	652	E. Haufier—B. Simon, San Antonio.....	1219
1936	Mrs. Ella Burmeister, Madison, Wis.....	612	Mrs. A. Lindermann—Mrs. L. Baldy, Milwaukee.....	1116
1937	Mrs. Anna Gottstine, Buffalo.....	647	L. Franke—G. Weber, Fort Wayne.....	1230
1938	Mrs. Rose Warner, Waukegan, Ill.....	622	F. Probert—E. Sablatnik, St. Louis.....	1215
1939	Helen Hengstler, Detroit.....	626	C. Powers—B. Reus, Grand Rapids.....	1130
1940	Mrs. Sally Twyford, Aurora, Ill.....	626	T. Morris—D. Burmeister Miller, Chicago.....	1181
1941	Nancy Huff, Los Angeles.....	662	J. Pittinger—M. J. Hogan, Los Angeles.....	1155
1942	Tillie Taylor, Newark, N. J.....	659	S. Hartrick—C. Allen, Detroit.....	1204
1946	Val Mikiel, Detroit.....	682	V. Focazio—P. Dusher, Niagara Falls, N. Y.....	1251

Year	All-events	Score	Team	Score
1929	Mrs. Emma Jaeger, Toledo.....	1700	Harvey's Market Sq. Rec., Kansas City.....	2538
1930	Mrs. Selva Twyford, Chicago.....	1727	Finucane Ladies, Chicago.....	2784
1931	Mrs. M. Schulte, St. Louis.....	1742	Alberti Jewelers, Chicago.....	2748
1932	Marie Warmbier, Chicago.....	1807	Martin Breit Realtors, St. Louis.....	2667
1933	Mrs. Sally Twyford, Aurora, Ill.....	1765	Alberti Jewelers, Chicago.....	2864
1934	Mrs. Esther Ryan, Milwaukee.....	1763	Tommy Dolls Five, Cincinnati.....	2616
1935	Marie Warmbier, Chicago.....	1911	Alberti Jewelers, Chicago.....	2765
1936	Mrs. Ella Burmeister, Madison, Wis.....	1683	Easty Five, Cleveland.....	2617
1937	Mrs. Louise Stockdale, Detroit.....	1761	The Heil Uniform Heat, Milwaukee.....	2685
1938	Dorothy Burmeister, Chicago.....	1843	The Heil Uniform Heat, Milwaukee.....	2706
1939	Ruth Troy, Dayton, Ohio.....	1724	Kornitz Pure Oil, Milwaukee.....	2618
1940	Mrs. Tess Morris, Chicago.....	1777	Logan Square Buicks, Chicago.....	2689
1941	Mrs. Sally Twyford, Aurora, Ill.....	1799	Rovick Bowling Shoes, Chicago.....	2661
1942	Nina Van Camp, Chicago.....	1888	Logan Square Buicks, Chicago.....	2815
1946	Catherine Fellmeth, Chicago.....	1835	Silver Seal Soda, St. Louis.....	2721

The sport of greyhound racing is at least a thousand years older than horse racing, the custom originating in Egypt. The ancient Egyptians raced their greyhounds in open fields with a wild hare as quarry. The fastest greyhounds can average a speed of more than 35 miles an hour over a 525-yard course.—*Encyc. Brit.*

Pedro A. Candioti's fourteenth attempt to swim the 250 miles from Rosario to Buenos Aires last March was his best effort thus far, the South American abandoning his try after being only five miles from his goal. Candioti, a druggist and physical culture instructor, was forced to give up when he began to fall asleep after being in the water for 76 hours.

DUCK PINS

Source: A. L. Ebersole, Executive Secretary, National Duck Pin Bowling Congress.

World Records

MEN'S TEAMS

Event	Record holder	Score
Team game	Black Rock, Bridgeport, Conn.	767
3-game set	Hick's Cafe, Baltimore	2,123
5-game set	Kelly Buick, Baltimore	3,348
10-game set	Park Circle Motor, Baltimore	6,460
15-game set	Popular Club Rec., Baltimore	9,420
Consecutive wins	Franks Tavern, Washington, D. C.	33
Season average	Hick's Cafe, Baltimore	632-70
3-man team game	Middletown (Conn.) All-Stars	475
3-man team set	Huguely's Bethesda (Md.) Stars	1,249
3-man team 5-game set	C. Hildebrand, E. Pickus, N. Hamilton, Baltimore	1,957

MEN'S DOUBLES

Event	Record holders	Score
Single game	W. Christiano-J. Silk, Norwalk, Conn.	352
3-game set	R. Haines-A. Felter, Baltimore	918
4-game set	W. Christiano-S. Pawlak, Westport, Conn.	1,120
5-game set	N. Hamilton-N. Paye, Baltimore	1,423
6-game set	N. Hamilton-W. Guerke, Baltimore	1,624
7-game set	S. Witkowski, Middletown, Conn.-J. Genovesi, Rockville, Conn.	1,938
8-game set	E. Campbell-L. Seim, Annapolis, Md.	2,128
9-game set	N. Hamilton-W. Guerke, Baltimore	2,431
10-game set	N. Hamilton-W. Guerke, Baltimore	2,720
Season average	P. Harrison-M. Rosenberg, Washington, D. C.	245-10

MEN'S INDIVIDUAL

Event	Record holder	Score
Single game	Eddie Funaro, New Haven, Conn.	239
3-game set	Arthur Lemke, Lowell, Mass.	542
4-game set	John Miller-Nova Hamilton, Baltimore (tie)	610
5-game set	Astor Clarke, Washington, D. C.	782
6-game set	Mike Dziadik, Derby, Conn.	912
7-game set	Joe LaMastra, Bridgeport, Conn.	1,053
8-game set	Steve Witkowski, Middletown, Conn.	1,160
9-game set	Wally Pipp, Hartford, Conn.	1,318
10-game set	Winnie Guerke, Baltimore	1,482
Season average	Hal Tucker, Baltimore	131-82

WOMEN'S TEAMS

Event	Record holder	Score
Team game	Aristocrat Dairy, Baltimore	680
3-game set	Virginia Dairy, Richmond, Va.	1,886
5-game set	Health Center Girls, Norfolk, Va.	2,896
Season average (36 games)	Recreation Girls, Baltimore	557-20
Consecutive wins	Bookies, Richmond, Va.	37
3-women team 7-game set	I. Simmons, J. White, E. Lieb, Baltimore	2,433

WOMEN'S DOUBLES

Event	Record holders	Score
Single game	A. Mullaney-M. Linthicum and B. James-E. Harris, Baltimore (tie)	310
3-game set	A. Levy-D. Smith, Norfolk, Va.	798
4-game set	E. Brose-T. McDonough, Baltimore	966
5-game set	A. Mullaney-A. Lucas, Baltimore	1,252
Season average	N. Zimmerman-M. Tuckey, Baltimore	217

WOMEN'S INDIVIDUAL

Event	Record holder	Score
Single game	Mrs. Peggy Vreeland, West Haven, Conn.	201
3-game set	Flo Reynolds, Milford, Conn.	469
4-game set	Vickie Croggan, Washington, D. C.	555
5-game set	Maxine Allen, Durham, N. C.	720
10-game set	Ida Simmons, Norfolk, Va.	1,355
Season average	Ida Simmons, Norfolk, Va.	121-16

SOCCER

Source: Flannery News Bureau of New York.

National Challenge Cup Winners

Emblematic of United States
Championship.

(Senior amateur and professional elevens eligible for tournaments.)

1914	Brooklyn (N. Y.) Field Club
1915	Bethlehem (Pa.) Steel Co. F. C.
1916	Bethlehem (Pa.) Steel Co. F. C.
1917	Fall River (Mass.) Rovers
1918	Bethlehem (Pa.) Steel Co. F. C.
1919	Bethlehem (Pa.) Steel Co. F. C.
1920	Ben Miller F. C., St. Louis, Mo.
1921	Robins Dry Dock F. C., Brooklyn, N. Y.
1922	Scullin Steel F. C., St. Louis, Mo.
1923	Paterson (N. J.) F. C.
1924	Fall River (Mass.) F. C.
1925	Shawshen S. C., Andover, Mass.
1926	Bethlehem (Pa.) Steel Co. F. C.
1927	Fall River (Mass.) F. C.
1928	New York Nationals S. C.
1929	Hakoah All Stars, New York
1930	Fall River (Mass.) F. C.
1931	Fall River (Mass.) F. C.
1932	New Bedford (Mass.) F. C.
1933	Stix, Baer & Fuller F. C., St. Louis, Mo.
1934	Stix, Baer & Fuller F. C., St. Louis, Mo.
1935	Central Breweries S. C., St. Louis, Mo.
1936	First German American S. C., Philadelphia
1937	New York Americans S. C.
1938	Sparta A. B. A., Chicago, Ill.
1939	St. Mary's Celtic S. C., New York
1940	No official champion*
1941	Pawtucket (R. I.) F. C.
1942	Gallatin S. C., Pittsburgh
1943	Brooklyn (N. Y.) Hispano S. C.
1944	Brooklyn (N. Y.) Hispano S. C.
1945	Brookhattan S. C., New York
1946	Vikings, Chicago

*Finalists: Baltimore (Md.) S. C. and Sparta A. B. A., Chicago, Ill.

National Amateur Challenge Cup Winners

1923	No official champion*
1924	Fleisher Yarn F. C., Philadelphia
1925	Toledo (Ohio) F. C.
1926	Defenders F. C., New Bedford, Mass.
1927	Heidelberg (Pa.) F. C.
1928	No official champion†
1929	Heidelberg (Pa.) F. C.
1930	Raffies F. C., Fall River, Mass.
1931	Goodyear F. C., Akron, Ohio
1932	Shamrock S. C., Cleveland, Ohio
1933	German American S. C., Philadelphia
1934	German American S. C., Philadelphia
1935	W. W. Riehl S. C., Castle Shannon, Pa.
1936	First German S. C., Brooklyn, N. Y.
1937	Highlander F. C., Trenton, N. J.
1938	Ponta Delgada F. C., Fall River, Mass.
1939	St. Michael's A. C., Fall River, Mass.
1940	Morgan Strasser S. C., Morgan, Pa.
1941	Fall River (Mass.) S. C.
1942	Fall River (Mass.) S. C.
1943	Morgan Strasser S. C., Morgan, Pa.
1944	Eintracht S. C., New York
1945	Eintracht S. C., New York
1946	Ponta Delgada F. C., Fall River, Mass.

*Medals to semifinalists: Fleisher Yarn F. C., Philadelphia; Roxbury (Mass.) F. C.; Jeannette (Pa.) F. C.; Swedish American A. A., Chicago, Ill. †Finalists: Powers-Hudson-Essex F. C., Fall River, Mass.; and Swedish American A. C., Detroit, Mich.

IRISH HURLING

County Cork won its fifth Irish hurling championship by defeating Kilkenny, seven goals and five points (26 points) to three goals and eight points (17 points) in the 1946 final, contested at Dublin. The match, played before a record crowd of 70,000, was the tenth between the two teams in the sixteen championships that have been held.

SOFTBALL

Source: M. J. Pauley, Executive Secretary, Amateur Softball Association.

World Amateur Champions

Year	Men	Women
1933	J. L. Gills, Chicago, Ill.	Great Northerns, Chicago, Ill.
1934	Ke-Nash-A's, Kenosha, Wis.	Hart Motors, Chicago, Ill.
1935	Crimson Coaches, Toledo, Ohio	Bloomer Girls, Cleveland, Ohio
1936	Kodak Park, Rochester, N. Y.	National Mfg. Co., Cleveland, Ohio
1937	Briggs Mfg. Co., Detroit, Mich.	National Mfg. Co., Cleveland, Ohio
1938	Pohlers, Cincinnati, Ohio	J. J. Kreig's, Alameda, Calif.
1939	Carr's, Covington, Ky.	J. J. Kreig's, Alameda, Calif.
1940	Kodak Park, Rochester, N. Y.	Arizona Ramblers, Phoenix, Ariz.
1941	Bendix Brakes, South Bend, Ind.	Higgins Midgets, Tulsa, Okla.
1942	Deep Rock Oilers, Tulsa, Okla.	Jax Maids, New Orleans, La.
1943	Hammer Field, Fresno, Calif.	Jax Maids, New Orleans, La.
1944	Hammer Field, Fresno, Calif.	Lind & Pomeroy, Portland, Ore.
1945	Zollners, Ft. Wayne, Ind.	Jax Maids, New Orleans, La.
1946	Zollners, Ft. Wayne, Ind.	Jax Maids, New Orleans, La.

Robert (Bud) Blattner, who played second base for the New York Giants in 1946, is a former world doubles table tennis

champion. Blattner, then 16 years old, paired with Jimmy McClure to win the title in 1937. They also won in 1938.

SKIING

SKIS were devised for utility, to aid those who had to travel over snow. The Norwegians, Swedes, Lapps and other inhabitants of northern lands used skis for many centuries before skiing became a sport. Emigrants from these countries brought skis to the United States with them. The first skier of record in the United States was a mailman by the name of "Snowshoe" Thompson, born and raised in Telemarken, Norway, who came to the United States and, beginning in 1850, used

skis through twenty successive winters in carrying mail from northern California to Carson Valley, Idaho.

Ski clubs sprang up about sixty years ago where there were Norwegian and Swedish settlers in Wisconsin and Minnesota and ski contests were held in that territory in 1886. On Feb. 21, 1904, at Ishpeming, Mich., a small group of skiers organized the National Ski Association that, with the rapid growth of the sport, now has approximately 300 member clubs.

Skiing Statistics

Source: National Ski Association of America

Long Jumps (Official American)

Year	Made by and place	Distance, in feet	Year	Made by and place	Distance, in feet
1904	T. Walters, Ishpeming, Mich.	82	1934	John Elvrum, Big Pines, Calif.	240
1905	Gustave Bye, Red Wing, Minn.	106	1937	Alf Engen, Salt Lake City, Utah	242
1908	John Evenson, Ishpeming, Mich.	122	1939	Alf Engen, Big Pines, Calif.	251
1910	August Nordby, Ishpeming, Mich.	140	1939	Bob Roecker, Iron Mountain, Mich.	257
1913	Lars Haugen, Steamboat Springs, Col.	185	1941	Alf Engen, Iron Mountain, Mich.	267
1917	Henry Hall, Steamboat Springs, Col.	203	1941	Torger Tokle, Leavenworth, Wash.	273
1919	Lars Haugen, Steamboat Springs, Col.	214	1941	Torger Tokle, Olympian Hill, Hyak, Wash.	288
1932	Hans Beck, Lake Placid, N. Y.	235	1942	Torger Tokle, Iron Mountain, Mich.	289

Joseph Bradl of Austria holds the world long-jump record with a leap of 350.96 feet, made at Planica, Yugoslavia, in 1938.

National Jumping Championships, 1946

(At Steamboat Springs, Colo.)

Event	Winner and home club	Jump distance, in feet		Points
		1st	2d	
Class A amateur	Arthur Devlin, Sno Birds of Lake Placid	250	255	229.45
Open class	Alf Engen, Sun Valley (Idaho) Ski Club	257	259	229.55
Class B	Wahldemar Fahlstrom, Sno Birds of Lake Placid	240	234	223.8
Class C (under 18)	Werner Schorr, Wisconsin Hoofers, Madison	145	157	217.3
Veterans' (over 32)	Ernest Jacobsson, Norge Ski Club, Chicago	219	218	225.75
Paul Bietila Trophy (to best American-born ski jumper)	Arthur Devlin			

National Downhill and Slalom and Combined Championships, 1946

(At Franconia, New Hampshire)

Event	Men	Time	Points
Downhill open and amateur	Steve Knowlton, Aspen (Colo.) Ski Club	2:06.9	—
Slalom open and amateur	Dick Movitz, U. S. Army, Salt Lake City	1:40.4	—
Combined open and amateur	Barney McLean, Zipfelberger, Denver	—	210
Women			
Downhill amateur	Paula Kann, Eastern Slopes, North Conway, N. H.	2:29.3	—
Slalom amateur	Rhona Wurtele, Penguin, Montreal	1:53.2	—
Combined amateur	Rhona Wurtele, Penguin, Montreal	—	245

The term "handicap" comes from the expression "hand in cap", referring to drawing lots, another method of equalizing chances.—*Encyc. Brit.*

Approximately 2,351,000 persons play at least ten rounds of golf a year on the country's 5209 courses. More than 63,000,000 rounds are played each year.—*Encyc. Brit.*

LIST OF OTHER CHAMPIONS FOR 1946

(This compilation does not include champions appearing in tabular matter.)

A titleholder's name appearing without an affiliation indicates that he has won more than one championship and his connection or home city will be found in a previous listing in the same sport.

TRACK AND FIELD

Men's National A. A. U. Outdoor

- 100 m.—Billy Mathis, Illinois.
- 200 m.—Barney Ewell, Shanahan C. C.
- 400 m.—Elmore Harris, Long Branch A. C.
- 800 m.—John Fulton, Olympic Club.
- 1500 m.—Lennart Strand, Sweden.
- 5000 m.—Frank Martin, N. Y. A. C.
- 10,000 m.—Ed O'Toole, N. Y. A. C.
- 3000-m. Steeplechase—James Rafferty, N. Y. A. C.
- 3000-m. Walk—Ernest Weber, New York.
- 110-m. High Hurdles—Harrison Dillard, Baldwin-Wallace.
- 200-m. Low Hurdles—Harrison Dillard.
- 400-m. Low Hurdles—Dr. Arky Erwin, Hot Springs, Ark.
- Shot-put—Bill Bangert, Normandy, Mo.
- Discus—Robert Fitch, Minnesota.
- Hammer—Irving Folsworth, N. Y. A. C.
- Javelin—Garland Adair, Austin A. C.
- 56-lb. Weight—Frank Berst, N. Y. A. C.
- High Jump—Dave Albritton, Dayton A. C.
- Broad Jump—Willie Steele, San Diego State.
- Hop, Step, and Jump—Ralph Tate, Oklahoma A. & M.
- Pole Vault—Irving Moore, Olympic Club.
- Team—New York A. C.
- 400-m. Relay—New York Pioneer Club.
- 1600-m. Relay—New York Pioneer Club.
- 2900-m. Relay—U. S. Army, Fort Dix, N. J.
- Decathlon—Irving Mondschein, N. Y. U.
- Pentathlon—Charles Beaudry, Marquette.
- 15-km. Run—Victor Dyrgall, New York.
- 20-km. Run—Charles Robbins, Roxbury, Mass.
- 25-km. Run—Thomas Crane, New Bedford Club, Mass.
- 30-km. Run—William Steiner, New York.
- Marathon—Gerard Cote, Quebec.
- 10-km. Walk—Ernest Weber, New York.
- 15-km. Walk—Ernest Weber.
- 20-km. Walk—John Deni, U. S. Navy.
- 25-km. Walk—William H. Mihaló, Detroit.
- 30-km. Walk—Morris Fleischer, New York.
- 50-km. Walk—George Wieland, Detroit.

Men's National A. A. U. Indoor

- 60 yd.—Tom Carey, N. Y. Pioneers.
- 60 yd. High Hurdles—Ed Dugger, Dayton.
- 60 yd. Low Hurdles—Ed Dugger.
- 600 yd.—Elmore Harris, Long Branch.
- 1000 yd.—Fred Sickinger, Manhattan.
- Mile—Leslie MacMitchell, New York.
- 3 miles—Forest Efav, Enid, Okla.
- Mile Walk—Joe Megyesy, N. Y. A. C.
- Mile Relay—New York University.
- 2-mile Relay—Manhattan College.
- Sprint Medley Relay—New York U.
- Shot-put—Bernard Mayer, New York U.

- 35-lb. Weight—Henry Dreyer, N. Y. A. C.
- High Jump—John Vislocky, N. Y. A. C.
- Broad Jump—Samuel Richardson, New York Pioneer Club.
- Pole Vault—Bill Moore, Northwestern.
- Team—New York A. C.

National Collegiate A. A. Outdoor

- 100-yd.—Bill Mathis, Illinois.
- 220-yd.—Herb McKenley, Illinois.
- 440-yd.—Herb McKenley.
- 880-yd.—Lewis Smith, Virginia Union.
- Mile—Bob Rehberg, Illinois.
- 2-mile—Frank Martin, New York Univ.
- 120-yd. High Hurdles—Harrison Dillard.
- 220-yd. Low Hurdles—Harrison Dillard.
- Shot-put—Bernard Mayer, New York Univ.
- Discus—Fortune Gordien, Minnesota.
- Javelin—Bob Likins, San Jose State.
- Pole Vault—Bill Moore, Northwestern.
- Broad Jump—John Robertson, Texas.
- High Jump—Ken Wiesner, Marquette.
- Team—Illinois.

Intercollegiate A. A. A. A. Outdoor

- 100 yd.—Herbert Douglas, Pittsburgh.
- 220 yd.—Robert Swain, Marquette.
- 440 yd.—William Kash, Navy.
- 880 yd.—Alvah Meeker, Colgate.
- Mile—Edward Walsh, Manhattan.
- 2 Miles—Frank Martin, New York Univ.
- Mile Relay—Navy.
- 120-yd. High Hurdles—Joseph Conley, Dartmouth.
- 220-yd. Low Hurdles—Alan Snyder, Dartmouth.
- Shot-put—Bernard Mayer, New York Univ.
- Discus—Harold Barker, Yale.
- Javelin—William Chynoweth, Army.
- Hammer—Frank Remaka, Holy Cross.
- Pole Vault—Theodore Wonch, Mich. State.
- Broad Jump—Herbert Douglas.
- High Jump—Ken Wiesner, Marquette.
- Team—Navy.

Women's National A. A. U. Outdoor

- 50 m.—Alice Coachman, Tuskegee.
- 100 m.—Alice Coachman.
- 220 yds.—Stella Walsh, Cleveland.
- 80-m. Hurdles—Nancy Cowperthwaite, German American A. C., New York.
- 440-yd. Relay—Malverneta A. C., Toronto.
- High Jump—Alice Coachman.
- Broad Jump—Stella Walsh.
- Shot-put—Dorothy Dodson, Chicago.
- Discus—Dorothy Dodson.
- Javelin—Dorothy Dodson.
- Baseball Throw—Marian Twining, Phila.
- Team—Tuskegee Institute.

CROSS-COUNTRY

- ional A. A. U.—Robert Black, Rhode Island State.
- ional A. A. U. Team—New York A. C.
- C. A. A.—Quentin Breisford, Ohio Wesleyan.
- C. A. A. Team—Drake.
- 4-A—Curtis C. Stone, Penn State.
- 4-A Team—New York University.

SWIMMING

Men's National A. A. U. Outdoor

- 100-m. Free Style—Bill Smith, Hawaii Univ. S. C.
- 100-m. Free Style—Bill Smith.
- 100-m. Free Style—Jimmy McLane, Phillips Academy, Andover, Mass.
- 100-m. Free Style—Jimmy McLane.
- 100-m. Free Style—Jimmy McLane.
- 100-m. Backstroke—Harry Holiday, Hawaii Univ. S. C.
- 100-m. Breast Stroke—Joe Verdeur, Philadelphia Turner Club.
- 100-m. Medley—Harry Holiday.
- 100-m. Medley Relay—Ohio State.
- 100-m. Free Style Relay—Olympic Club.
- 100-m. Dive—Bruce Harlan, Naval Air T. T. C., Jacksonville, Fla.
- 100-m. Dive—Dr. Sammy Lee, Pasadena A. C.
- Team—Hawaii University Swimming Club.

Men's National A. A. U. Indoor

- 100-yd. Free Style—Walter Ris, Great Lakes N.T.S.
- 100-yd. Free Style—Walter Ris.
- 100-yd. Free Style—Jack Hill, Ohio State.
- 100-yd. Backstroke—Robert Cowell, Navy.
- 100-yd. Breast Stroke—Joe Verdeur.
- 100-yd. Medley—Joe Verdeur.
- 100-yd. Medley Relay—Ohio State.
- 100-yd. Free Style Relay—Ohio State.
- One-meter Dive—Miller Anderson, Ohio State.
- Three-meter Dive—Miller Anderson.
- Team—Ohio State.

Women's National A. A. U. Outdoor

- 100-m. Free Style—Brenda Helser, Los Angeles A. C.
- 100-m. Free Style—Ann Curtis, Crystal Plunge.
- 100-m. Free Style—Ann Curtis.
- 100-m. Free Style—Ann Curtis.
- 100-m. Backstroke—Suzanne Zimmerman, Multnomah Club.
- 100-m. Backstroke—Suzanne Zimmerman.
- 100-m. Breast Stroke—Jeanne Wilson, Lake Shore A. C., Chicago.
- 100-m. Breast Stroke—Nancy Merkl, Multnomah Club.
- 100-m. Medley—Nancy Merkl.
- 100-m. Medley Relay—Multnomah Club, Portland, Ore.
- 100-m. Free Style Relay—Crystal Plunge.
- 100-m. Dive—Zoe Ann Olsen, Athens A. C., Oakland, Calif.
- Platform Dive—Victoria Draves, Los Angeles.
- Team—Crystal Plunge, San Francisco.

Women's National A. A. U. Indoor

- 100-yd. Free Style—Brenda Helser, Portland, Ore.
- 220-yd. Free Style—Ann Curtis.
- 440-yd. Free Style—Ann Curtis.
- 100-yd. Backstroke—Suzanne Zimmerman.
- 100-yd. Breast Stroke—Patty Sinclair, San Francisco.
- 220-yd. Breast Stroke—Patty Sinclair.
- 300-yd. Medley—Nancy Merkl, Portland.
- 300-yd. Medley Relay—Multnomah A. C.
- 400-yd. Free Style Relay—Multnomah A. C. "A" Team.
- One-meter Dive—Zoe Ann Olsen, Oakland.
- Three-meter Dive—Patsy Elsener, San Francisco.
- Team—Crystal Plunge, San Francisco.

National Collegiate A. A.

- 50-yd. Free Style—Bob Anderson, Stanford.
- 100-yd. Free Style—Halo Hirose, Ohio State.
- 220-yd. Free Style—Jack Hill, Ohio State.
- 400-yd. Free Style—Jack Hill, Ohio State.
- 1,500-meter Free Style—Dave Maclay, Williams.
- 150-yd. Backstroke—Bob Cowell, Navy.
- 200-yd. Breast Stroke—Charles Keating, Cincinnati.
- 300-yd. Medley Relay—Ohio State.
- 400-yd. Free Style Relay—Michigan State.
- One-meter Dive—Miller Anderson, Ohio State.
- Three-meter Dive—Miller Anderson.
- Team—Ohio State.

TENNIS

Wimbledon

- Mixed Doubles—Louise Brough and Tom Brown, United States.

National Outdoor

- Mixed Doubles—Margaret Osborne, San Francisco and William Talbert, Wilmington, Del.
- Veterans' Singles—J. Gilbert Hall, New York.
- Veterans' Doubles—J. Gilbert Hall and Sidney Adelstein, New York.
- Women Veterans' Singles—Mrs. Philip Theopold, Dedham, Mass.
- Women Veterans' Doubles—Mrs. Hazel H. Wightman, Brookline, Mass., and Edith Sigourney, Boston.
- Father and Son—Arthur C. Nielson, Sr., and Arthur C. Nielson, Jr., Chicago.
- Clay Court Singles—Frank Parker, Los Angeles.
- Clay Court Doubles—Gardnar Mulloy, Miami, Fla., and William Talbert.
- Women's Clay Court Singles—Barbara Kruse, San Francisco.
- Women's Clay Court Doubles—Shirley Fry, Akron, Ohio, and Mrs. Mary Arnold Prentiss, Los Angeles.

Intercollegiate Outdoor

- National Singles—Bob Falkenburg, Southern California.
- National Doubles—Bob Falkenburg and Tom Falkenburg, Southern California.

Tennis—(cont.)**National Indoor**

- Singles—Francisco Segura, Guayaquil, Ecuador.
 Doubles—Donald McNeill, Oklahoma City, and Frank Guernsey, Orlando, Fla.
 Women's Singles—Mrs. Helen P. Rihbany, New York.
 Women's Doubles—Ruth Carter, Brookline, Mass., and Mrs. Helen P. Rihbany.
 Mixed Doubles—George W. Mandell, Waban, Mass., and Mrs. Helen P. Rihbany.

Professional

- World Clay Court Singles—Donald Budge, Los Angeles.
 World Clay Court Doubles—Bobby Riggs and Welby Van Horn, Los Angeles.
 National Singles—Bobby Riggs.
 National Doubles—Frankie Kovacs, Oakland, Calif., and Fred Perry, Las Vegas, Nev.

GOLF**Men**

- All-American—Herman Barron, White Plains, N. Y.
 Augusta Masters—Herman Keiser, Akron, Ohio.
 North and South Open—Ben Hogan, Hershey, Pa.
 North and South Amateur—Frank Stranahan, Toledo.
 Western Amateur—Frank Stranahan.
 U. S. Senior—Ellis Knowles, Rye, N. Y.
 Duke of Devonshire Cup—United States.
 Canadian P. G. A.—Ben Hogan.
 Canadian Open—George Fazio, Los Angeles.

Women

- National Open—Patty Berg, Minneapolis.
 All-American—Mrs. Mildred D. Zaharias, Denver.
 Western Open—Louise Suggs, Lithia Springs, Ga.
 Western Amateur—Louise Suggs.
 Trans-Mississippi—Mrs. Mildred D. Zaharias.
 North and South—Louise Suggs.
 Eastern—Laddie Irwin, Glen Ridge, N. J.

BOXING**National A. A. U.**

- 112-lb.—David Buna, Hawaii.
 118-lb.—Tsuneshi Naruo, Hawaii.
 126-lb.—Leo Kelley, Pittsburgh.
 135-lb.—Joseph Discopelli, U. S. M. C., Cherry Point, N. C.
 147-lb.—Robert Takeshita, Hawaii.
 160-lb.—Harold Anspach, U. S. M. C., Cherry Point, N. C.
 175-lb.—Bob Foxworth, Chicago.
 Heavyweight—Charles Lester, Cleveland.
 Team—Hawaii and Cherry Point (N. C.) Marines (tie).

WRESTLING**National A. A. U.**

- 115-lb.—Archie Curry, Tulsa, Okla.
 121-lb.—Richard Hauser, Waterloo, Iowa.
 128-lb.—Edward Collins, New York A. C.
 135-lb.—Lowell Lange, Waterloo, Iowa.
 145-lb.—James Miller, Ithaca (N. Y.) Y.
 155-lb.—Robert Roemer, Alameda N. A.
 165-lb.—Douglas Lee, Baltimore Y. M. C.
 175-lb.—Frank Bissell, New York A. C.
 191-lb.—Henry Wittenberg, West Side (N. Y.) Y. M. C. A.
 Heavyweight—Mike DeBiase, Alameda (Calif.) N. A. S.
 Team—New York A. C.

National Collegiate A. A.

- 121-lb.—Cecil Mott, Iowa Teachers.
 128-lb.—Gerald Leeman, Iowa Teachers.
 136-lb.—David Arndt, Oklahoma A. and M.
 145-lb.—William Koll, Iowa Teachers.
 155-lb.—William Courtright, Michigan.
 165-lb.—Dave Shapiro, Illinois.
 175-lb.—George Dorsch, Okla. A. and M.
 Heavyweight—George Bolas, Ohio State.
 Team—Oklahoma A. and M.

ROWING**British Henley**

- Diamond Sculls—Jean Sephardiades, France.
 Grand Challenge Cup—Leanders, England.

National Senior

- Singles—John B. Kelly, Jr., Vesper B. C. Philadelphia.
 Association Singles—John B. Kelly, Jr.
 Quarter-mile Dash—John Kieffer, Fairmount R. A., Philadelphia.
 Double Shell—Vesper B. C. (C. H. McIntyre and J. McIntyre).
 Quadruple Sculls—Fairmount R. A.
 4-oared Shell without Coxswain—Detroit B. C.
 4-oared Shell with Coxswain—Detroit B. C.
 8-oared Shell—Detroit B. C.
 Intermediate 8-oared Shell—Fairmount R. A.
 145-lb. Quarter-mile Singles—Joe Angyal, Ravenswood B. C., Long Island City.
 145-lb. Double Shell—Detroit B. C. (B. Holliday and D. Jackson).
 145-lb. Quadruple Sculls—Undine Barge Club, Philadelphia.
 145-lb. 4-oared Shell with Coxswain—Detroit B. C.
 Club (Barnes Trophy)—Detroit Boat Club.

HANDBALL**National A. A. U. 4-Wall Softball**

- Singles—Angelo Trullio, 92d St. Y. M. H. A. New York.
 Doubles—Frank Coyle and Eddie Linz, New York A. C.

HORSESHOE PITCHING

- World—Ted Allen, Boulder, Col.

ICE SKATING

Speed

- Men's North American—Bob Fitzgerald, Minneapolis, Minn.
 Women's North American—Eileen Whalley, Winnipeg, Canada.
 Men's National—Bob Fitzgerald.
 Women's National—Elaine Gordon, Chicago, Ill.

DUCK PINS

National

- Men's All-Events—Joe Radocy, Torrington, Conn.
 Men's Singles—Charles Kebart, New Haven.
 Men's Doubles—H. Roetzal and B. Powley, Bridgeport, Conn.
 Men's Team—Casino Five, Meriden, Conn.
 Women's All-Events—Lorraine Gulli, Washington.
 Women's Singles—Kitty Scheuchik, Baltimore.
 Women's Doubles—G. Bohn and L. Krah, New Haven.
 Women's Team—Allstate Life Insurance Co., Baltimore.

GYMNASTICS

National A. A. U.

- All-around—Frank Cumiskey, Swiss Gymnastic Society.
 Calisthenics—Paul E. Fina, Chicago Sokol.
 Long Horse—Rudolph Hradecky, Bohemian Gym. Assn. Sokol.
 Side Horse—Frank Cumiskey.
 Horizontal Bar—Frank Cumiskey.
 Parallel Bars—Edward Scrobe, D. A. Turnverein, N. Y.
 Flying Rings—William Bonsall, Penn State.
 Tumbling—Andrew Pasinski, Jersey City.
 Rope Climb—Stephen Greene, Penn State.
 Indian Clubs—E. M. Hennig, Cleveland.
 Team—Swiss Gymnastic Society, Union City, N. J.

CANOEING

National Senior

- 1-Man Single Blade—Mike Kulakowich, Yonkers (N. Y.) C. C.
 1-Man Double Blade—Ernest Riedel, Pendleton C. C., New York.
 Tandem Single Blade—John Haas and Frank Krick, Cacawa C. C., Philadelphia.
 Tandem Double Blade—Ernest Riedel and Adolph Springel, Pendleton C. C.
 4-Boat Single Blade—Yonkers (Steve Macknowski, Steve Lysak, Mike Kulakowich, John Paretti).
 4-Boat Double Blade—Washington (D. C.) C. C. (William Rhodes, William Havens, Jr., Edward Trilling, H. Vollmer).
 Tilting—William Havens, Jr., and William Rhodes.

YACHTING

- King's Cup—Henry C. Taylor's Baruna (yaw).
 Astor Cup—John B. Shethar's Sylvia (sloop).
 Newport-to-Bermuda Race—A. H. Fuller's Gesture (sloop).
 St. Petersburg-to-Havana Race—Harlow Davock's Away (sloop).
 Vineyard Lightship-and-Return Race—Mrs. Whitney Henry's Good News (yaw).
 Women's National Champion (Mrs. C. F. Adams Cup)—Edgartown (Mass.) crew; Mrs. Virginia Weston Besse, skipper.
 International Class Sloop Team Match (Amorita Cup)—Bermuda defeated Long Island Sound.
 International Lightning Class—Roger Willcox, Massachusetts Institute of Technology.
 National Comet Class—Philip A. Somervell, Riverton, N. J.

WEIGHT LIFTING

National A. A. U.

- 123 lb.—J. N. De Pietro, Hollywood, Calif.
 132 lb.—Emerick Ishikawa, Detroit.
 148 lb.—Pete George, Cleveland.
 165 lb.—Frank I. Spellman, York, Pa.
 181 lb.—Frank Kay, Chicago.
 Heavyweight—John Davis, Brooklyn.

ARCHERY

Target Shoot

- Men—G. Wayne Thompson, Richmond, Calif.
 Women—Ann Weber, Bloomfield, N. J.
 Junior Girls'—Alice A. Bredhoft, Millington, N. J.
 Junior Boys'—Jay Reeg, St. Louis.

Flight Shoot

- Men—Herb Henderson, Evansville, Ind.
 Women—Millie Hill, Dayton, Ohio.
 Junior Girls'—Peggy Dunaway, Springfield, Ohio.
 Junior Boys'—Richard Knorr, Cincinnati.

BASKETBALL

- New York Invitation—Kentucky.
 Men's A. A. U.—Phillips 66 Oilers, Bartlesville, Okla.
 Women's A. A. U.—Nashville (Tenn.) Goldblumes.

HARNESS RACING

- Aged—Trotter: Kaola, 2.03; Pacer: Blue Again, 2.02¼.
 3-Year-Olds—Trotter: Chestertown, 2.01¼; Pacer: Ensign Hanover, 2.01.
 2-Year-Olds—Trotter: Hoot Mon, 2.03½; Pacer: Poplar Byrd, 2.03½.

FOOTBALL

THE PASTIME of kicking a ball around goes back beyond the limits of recorded history. Ancient savage tribes played football of a primitive kind. There was a ball-kicking game played by Athenians and Spartans and Corinthians 2500 years ago and the Greeks had a name for it: Episkuros. The Romans had a somewhat similar game called Harpastum and are supposed to have carried the game with them when they invaded the British Isles in the First Century, B. C.

Undoubtedly the game known in the United States as Football traces directly to the English game of Rugby, though the modifications have been many and rather sweeping in some directions. There was informal football on our college lawns well over a century ago and an annual Freshman-Sophomore series of "scrimmages" began at Yale in 1840. But the first formal intercollegiate football game in this country was the Princeton-Rutgers contest played at New Brunswick, N. J., on Nov. 6, 1869, with Rutgers winning by 6 goals to 4. Columbia took to the intercollegiate football field in 1870 and Yale in 1872. Soon many colleges were playing football in the autumn.

In those old days games were played

with twenty-five, twenty, fifteen or eleven men on a side by mutual agreement. In 1880 there was a football convention at which Walter Camp of Yale persuaded the delegates to agree to a rule calling for eleven players on a side. In 1882 there was adopted the rule requiring the offensive team to make 5 yards in three downs or surrender the ball to its opponents. The game grew so rough that it was attacked as brutal by many critics and some colleges abandoned the sport. Conditions were so bad in 1906 that President Theodore Roosevelt, an enthusiast for all sports, called a meeting of Yale, Harvard and Princeton representatives at the White House in the hope of reforming and improving the game. The outcome was that the game, with the forward pass introduced and some other modifications of the rules inserted, became faster and cleaner and gradually grew to the tremendous popularity it enjoys today.

Professional football, now firmly established, is an outgrowth of intercollegiate football. The first professional game was played in 1895 at Latrobe, Pa. The National Football League was founded in 1921. The All-America Conference went into action in 1946.

Football Statistics

Intercollegiate

Source: Official NCAA Football Guide, published by A. S. Barnes & Co.

RECORD OF ANNUAL POSTSEASON GAMES

Rose Bowl

Pasadena, Calif.

1902	Michigan 49, Stanford 0
1916	Washington State 14, Brown 0
1917	Oregon 14, Pennsylvania 0
1918	Mare Island Marines 19, Great Lakes 7
1919	Great Lakes 17, Mare Island Marines 0
1920	Harvard 7, Oregon 6
1921	California 28, Ohio State 0
1922	Washington & Jefferson 0, California 0
1923	Southern California 14, Penn State 3
1924	Navy 14, Washington 14
1925	Notre Dame 27, Stanford 10
1926	Alabama 20, Washington 19
1927	Alabama 7, Stanford 7
1928	Stanford 7, Pittsburgh 6
1929	Georgia Tech 8, California 7
1930	Southern California 47, Pittsburgh 14
1931	Alabama 24, Washington State 0

1932	Southern California 21, Tulane 12
1933	Southern California 35, Pittsburgh 0
1934	Columbia 7, Stanford 0
1935	Alabama 29, Stanford 13
1936	Stanford 7, Southern Methodist 0
1937	Pittsburgh 21, Washington 0
1938	California 13, Alabama 0
1939	Southern California 7, Duke 3
1940	Southern California 14, Tennessee 0
1941	Stanford 21, Nebraska 13
1942	Oregon State 20, Duke 16*
1943	Georgia 9, U. C. L. A. 0
1944	Southern California 29, Washington 0
1945	Southern California 25, Tennessee 0
1946	Alabama 34, Southern California 14
1947	Illinois 45, U. C. L. A. 14

*Played at Durham, N. C.

East-West

San Francisco, Calif.

1925 West 7, East 0 (Dec.)	1934 West 12, East 0	1941 West 20, East 14
1927 West 7, East 3	1935 West 19, East 13	1942 West 6, East 6*
1927 West 16, East 6 (Dec.)	1936 East 19, West 3	1943 East 13, West 12
1928 East 20, West 0	1937 East 3, West 0	1944 East 13, West 13
1930 East 19, West 7	1938 East 0, West 0	1945 West 13, East 7
1930 West 3, East 0 (Dec.)	1939 West 14, East 0	1946 East 7, West 7
1932 East 6, West 0	1940 West 28, East 11	1947 West 13, East 9
1933 West 21, East 13		

*Played at New Orleans, La.

Orange Bowl

Miami, Fla.

1933 Miami 7, Manhattan 0
1934 Duquesne 33, Miami 7
1935 Bucknell 26, Miami 0
1936 Catholic University 20, Mississippi 19
1937 Duquesne 13, Mississippi State 12
1938 Alabama Poly. 6, Michigan State 0
1939 Tennessee 17, Oklahoma 0
1940 Georgia Tech 21, Missouri 7
1941 Mississippi State 14, Georgetown 7
1942 Georgia 40, Texas Christian 26
1943 Alabama 37, Boston College 21
1944 Louisiana State 19, Texas A & M 14
1945 Tulsa 26, Georgia Tech 12
1946 Miami 13, Holy Cross 6
1947 Rice 8, Tennessee 0

Cotton Bowl

Dallas, Tex.

1937 Texas Christian 16, Marquette 6
1938 Rice 28, Colorado 14
1939 St. Mary's (Calif.) 20, Texas Tech 13
1940 Clemson 6, Boston College 3
1941 Texas A & M 13, Fordham 12
1942 Alabama 29, Texas A & M 21
1943 Texas 14, Georgia Tech 7
1944 Randolph Field 7, Texas 7
1945 Oklahoma A & M 34, Texas Christian 0
1946 Texas 40, Missouri 27
1947 Louisiana State 0, Arkansas 0

Sugar Bowl

New Orleans, La.

1935 Tulane 20, Temple 14
1936 Texas Christian 3, Louisiana State 2
1937 Santa Clara 21, Louisiana State 14
1938 Santa Clara 6, Louisiana State 0
1939 Texas Christian 15, Carnegie Tech 7
1940 Texas A & M 14, Tulane 13
1941 Boston College 19, Tennessee 13
1942 Fordham 2, Missouri 0
1943 Tennessee 14, Tulsa 7
1944 Georgia Tech 20, Tulsa 18
1945 Duke 29, Alabama 26
1946 Oklahoma A & M 33, St. Mary's (Calif.) 13
1947 Georgia 20, North Carolina 10

Sun Bowl

El Paso, Tex.

1936 Hardin-Simmons 14, New Mexico Tchrs. 14
1937 Hardin-Simmons 34, Texas Mines 6
1938 West Virginia 7, Texas Tech 6
1939 Utah 26, New Mexico 0
1940 Catholic University 0, Tempe (Ariz.) Tchrs. 0
1941 Western Reserve 26, Tempe (Ariz.) Tchrs. 13
1942 Tulsa 6, Texas Tech 0
1943 2d Army A.F. 13, Hardin-Simmons 7
1944 Southwestern (Texas) 17, New Mexico 0
1945 Southwestern (Texas) 35, U. of Mexico 0
1946 New Mexico 34, Denver 24
1947 Cincinnati 18, Virginia Tech 6

Collier's 1946 All-America Football Team

Selected by Grantland Rice

Source: Collier's Weekly. Reprinted by special permission.

Position	Player	College	Age	Height	Weight
Center	Paul Duke	Georgia Tech.	22	6'1"	210
Guard	Weldon Humble	Rice	25	6'1"	214
Guard	John Mastrangelo	Notre Dame	20	6'1"	210
Tackle	Dick Huffman	Tennessee	23	6'2"	230
Tackle	George Connor	Notre Dame	21	5'10"	200
End	Henry C. Foldberg	Army	23	6'1"	200
End	Burr Baldwin	U.C.L.A.	24	6'1"	196
Quarterback	John Lujack	Notre Dame	21	6'	180
Halfback	Glenn W. Davis	Army	21	5'10"	170
Halfback	Charles Trippi	Georgia	24	5'11"	185
Fullback	Felix A. Blanchard	Army	21	6'	205
Utility back	Y. Arnold Tucker	Army	22	5'9"	175

Football Milestones

On Saturday, Oct. 12, 1946, the University of Pennsylvania played its 700th intercollegiate football game and celebrated by crushing Dartmouth, 39 to 6. On that

same day Princeton entertained its old Big Three rival, Harvard, in the Tigers' 600th contest. Harvard beat Princeton, 13 to 12.

Famous Series Records

Until 1883, when scoring by points was generally adopted, scores were kept by goals, touchdowns and safeties. Earlier results of Big Three games: 1873—Prin. 3, Yale 0; Harv. 4G, 2T, Yale 0; 1876—Yale 1G, Harv. 2T; Yale 10, Prin. 0; 1877—Yale 0, Prin. 0; Harv. 1G, 1T, Prin. 1T (Spring); Prin. 1G, 1T, Harv. 2T (Fall); 1878—Yale 1G, 7S, Harv. 13S, Prin. 1, Yale 0; Prin. 1T, Harv. 0; 1879—Harv. 4S, Yale 2S; Yale 0, Prin. 0; Prin. 1G, Harv. 0; 1880—Yale 1G, 1T, 2S, Harv. 9S; Yale 0, Prin. 0; Prin. 2G, 2T, Harv. 1G, 1T; 1881—Harv. 4S, Yale 0; Yale 0, Prin. 0; Harv. 0, Prin. 0; 1882—Yale 1G, 3T, Harv. 2S; Yale 2, Prin. 1; Harv. 1G, 1T, Prin. 1G.

Year	Harv. Yale	Yale Prin.	Harv. Prin.	Army-Navy	Year	Harv. Yale	Yale Prin.	Harv. Prin.	Army-Navy
1883	2 23	6 0	7 26	.. ..	1914	36 0	19 14	20 0	20 0
1884	0 52	0 0	6 36	.. ..	1915	41 0	13 7	10 6	14 0
1885	.. ..	5 6	.. ..	.. ..	1916	3 6	10 0	3 0	15 7
1886	4 29	0 0	0 12	.. ..	1919	10 3	6 13	10 10	0 6
1887	8 17	12 0	12 0	.. ..	1920	9 0	0 20	14 14	0 7
1888	.. ..	10 0	6 18	.. ..	1921	10 3	13 7	3 10	0 7
1889	0 6	0 10	15 41	.. ..	1922	10 3	0 3	3 10	17 14
1890	12 6	32 0	.. ..	0 24	1923	0 13	27 0	5 0	0 0
1891	0 10	19 0	.. ..	32 16	1924	6 19	10 0	0 34	12 0
1892	0 6	12 0	.. ..	4 12	1925	0 0	12 25	0 36	10 3
1893	0 6	0 6	.. ..	4 6	1926	7 12	7 10	0 12	26 26
1894	4 12	24 0	.. ..	.. ..	1927	0 14	14 6	.. ..	14 9
1895	.. ..	16 10	4 12	.. ..	1928	17 0	2 12	.. ..	6 0
1896	.. ..	6 24	0 12	.. ..	1929	10 6	13 0	.. ..	17 7
1897	0 0	6 0	.. ..	.. ..	1930	13 0	10 7	.. ..	6 0
1898	17 0	0 6	.. ..	.. ..	1931	0 3	51 14	.. ..	17 7
1899	0 0	10 11	.. ..	17 5	1932	0 19	7 7	.. ..	20 0
1900	0 28	29 5	.. ..	7 11	1933	19 6	2 27	.. ..	12 7
1901	22 0	12 0	.. ..	11 5	1934	0 14	7 0	0 19	0 3
1902	0 23	12 5	.. ..	22 8	1935	7 14	7 38	0 35	28 6
1903	0 16	6 11	.. ..	20 5	1936	13 14	26 23	14 14	0 7
1904	0 12	12 0	.. ..	11 0	1937	13 6	26 0	34 6	6 0
1905	0 6	23 4	.. ..	6 6	1938	7 0	7 20	26 7	14 7
1906	0 6	0 0	.. ..	0 10	1939	7 20	7 13	6 9	0 10
1907	0 12	12 10	.. ..	0 6	1940	28 0	7 10	0 0	0 14
1908	4 0	11 6	.. ..	6 4	1941	14 0	6 20	6 4	6 14
1909	0 8	17 0	.. ..	.. ..	1942	3 7	13 6	19 14	0 14
1910	0 0	5 3	.. ..	0 3	1943	.. ..	27 6	.. ..	0 13
1911	0 0	3 6	6 8	0 3	1944	.. ..	.. ..	.. ..	23 7
1912	20 0	6 6	16 6	0 6	1945	0 28	20 14	.. ..	32 13
1913	15 5	3 3	3 0	22 9	1946	14 27	30 2	13 12	21 18

Notre Dame-Army Series Record

1913 N. D. 35, A. 13	1923 N. D. 13, A. 0	1931 A. 12, N. D. 0	1939 N. D. 14, A. 0
1914 A. 20, N. D. 7	1924 N. D. 13, A. 7	1932 N. D. 21, A. 0	1940 N. D. 7, A. 0
1915 N. D. 7, A. 0	1925 A. 27, N. D. 0	1933 N. D. 13, A. 12	1941 A. 0, N. D. 0
1916 A. 30, N. D. 10	1926 N. D. 7, A. 0	1934 N. D. 12, A. 6	1942 N. D. 13, A. 0
1917 N. D. 7, A. 2	1927 A. 18, N. D. 0	1935 A. 6, N. D. 6	1943 N. D. 26, A. 0
1919 N. D. 12, A. 9	1928 N. D. 12, A. 6	1936 N. D. 20, A. 6	1944 A. 59, N. D. 0
1920 N. D. 27, A. 17	1929 N. D. 7, A. 0	1937 N. D. 7, A. 0	1945 A. 48, N. D. 0
1921 N. D. 28, A. 0	1930 N. D. 7, A. 6	1938 N. D. 19, A. 7	1946 A. 0, N. D. 0
1922 A. 0, N. D. 0			

FOOTBALL CHAMPIONS FOR 1946

National (AP poll)—Notre Dame.

Eastern (Lambert Trophy)—Army.

Conferences

Ivy League—Penn, Yale, Harvard (tie).

Big Nine—Illinois.

Southern—North Carolina.

Southeastern—Georgia, Tennessee (tie).

Southwest—Rice and Arkansas (tie).

Pacific Coast—U.C.L.A.

Big Six—Oklahoma and Kansas (tie).

Big Seven—Denver, Utah State (tie).

Missouri Valley—Tulsa.

Border—Hardin-Simmons.

Colored Athletic Assn.—Morgan State.

Report from Ansonia
Special to the Almanac

ANSONIA, Conn.—For the benefit of a golfer who never was able to keep a correct golf score, Mr. H. I. Phillips of Milford,

Conn., the population of Ansonia has been given as 19,210 by a trusted official of that great metropolis.

Intercollegiate Team Records, 1946

ALABAMA

27—Furman	7
7—Tulane	6
14—So. Carolina	0
54—S. W. La.	0
0—Tennessee	12
21—Kentucky	7
0—Georgia	14
21—La. State	31
12—Vanderbilt	7
7—Boston College	13
24—Miss. State	7

187

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AMHERST

13—Coast Guard Ac.	14
7—Bowdoin	0
13—Colby	6
13—Wesleyan	46
25—Tufts	20
0—R. P. I.	13
13—Williams	21

84

120

ARIZONA

67—Ariz. (Tempe) St.	0
7—Utah	14
27—Texas Mines	13
47—College of Pacific	13
0—Marquette	20
8—Hardin-Simmons	19
21—Santa Clara	21
13—New Mexico	13
0—Texas Tech	16
28—Kansas State	7

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ARKANSAS

21—N. W. La. State	14
21—Okla. A. & M.	21
34—T. C. U.	14
13—Baylor	0
0—Texas	20
7—Mississippi	9
7—Texas A. & M.	0
7—Rice	0
13—S. M. U.	0
13—Tulsa	14

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*ARMY

35—Villanova	0
21—Oklahoma	7
46—Cornell	21
20—Michigan	14
48—Columbia	14
19—Duke	0
19—West Virginia	0
0—Notre Dame	7
34—Penn	7
21—Navy	18

263

80

AUBURN

13—Miss. South	12
26—Furman	6
27—St. Louis	32
0—Tulane	32
6—C. Tech	27
0—Vanderbilt	19
0—Miss. State	33
0—Georgia	41
13—Clemson	21
47—Florida	12

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210

†BATES

6—Mass. State	0
25—Trinity	0
19—Tufts	6
20—Northeastern	0
7—Maine	4
6—Bowdoin	0
6—Colby	0

89

10

BAYLOR

21—Southwestern	7
16—T. C. U.	19
0—Arkansas	13
6—Texas Tech	13
0—Texas A. & M.	17
7—Tennessee	22
0—Tulsa	17
0—So. Methodist	35
6—Rice	38

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BOSTON COLLEGE

6—Wake Forest	12
34—Mich. State	20
56—Kings Point	7
14—Villanova	12
72—N. Y. U.	6
20—Georgetown	13
13—Tennessee	33
13—Alabama	7
6—Holy Cross	13

234

123

BOSTON U.

6—Syracuse	41
21—Amer. Intl.	0
27—Northeastern	0
35—Tufts	0
14—Brown	14
39—R. I. State	6
7—New Hampshire	13
34—Coast Guard	7

183

81

BOWDOIN

8—Mass. State	11
0—Amherst	7
26—Williams	0
6—Colby	0
0—Bates	6
7—Maine	23

47

47

BROOKLYN COLLEGE

8—N. Y. U.	19
0—Alfred	12
25—Wagner	19
13—Hofstra	8
12—C. C. N. Y.	8
7—Kings Point	41
6—R. P. I.	26

71

133

BROWN

14—Canisius	7
12—Princeton	33
29—Rhode Island	0
20—Dartmouth	13
14—Boston U.	14
19—Holy Cross	49
0—Yale	28
0—Harvard	49
14—Colgate	20

122

185

BUCKNELL

0—Cornell	21
6—Penn State	48
0—Muhlenberg	0
21—Buffalo	0
29—Lafayette	0
19—Gettysburg	27
14—Delaware	27
6—Temple	27
0—Rutgers	25

10

154

BUFFALO

40—Moravian	0
28—R. P. I.	13
20—Hobart	7
0—Bucknell	21
20—Wayne	25
32—Bethany	6
20—Alfred	12
28—Carnegie	0
36—Johns Hopkins	0

224

84

CALIFORNIA

7—Wisconsin	28
13—Oregon	14
20—St. Mary's	13
6—U. C. L. A.	13
6—Washington	20
47—Washington State	14
0—So. California	14
7—Oregon State	28
6—Stanford	25

112

169

CANISIUS

34—Western Ontario	3
7—Brown	14
31—St. Mary	0
42—Alliance	0
14—Niagara	2
7—Bowling Green	13
0—St. Bonaventure	13
13—Scranton	13

148

58

CARNEGIE TECH

0—Oberlin	25
0—Geneva	36
0—W. & J.	48
0—Case	24
0—Buffalo	28
0—Grove City	20

0

181

CHATTANOOGA

7—Miss. State	41
37—Tenn. Tech	6
7—Tennessee	47
34—Murray	6
13—Miami	33
14—Wake Forest	32
46—Newberry	7
27—Georgia	48
34—Rollins	6

219

226

CINCINNATI

15—Indiana	6
7—Kentucky	26
39—Marshall	14
19—Dayton	0
19—Ohio U.	0
16—Mich. State	7
0—Tulsa	20
39—Xavier	0
34—Western Reserve	7
13—Miami (O)	7

203

87

CITADEL

7—Presbyterian	6
12—W. and M.	51
28—Newberry	7
0—Furman	14
7—So. Carolina	19
0—Geo. Wash.	18
7—V. M. I.	26
21—Davidson	13

82

154

C. C. N. Y.

7—Susquehanna	13
0—West Chester	20
0—Drexel	19
0—F. & M.	49
27—Wagner	6
8—Brooklyn	12
0—Mass. State	59
0—E. Stroudsburg	27

42

205

CLEMSON

39—Presbyterian	0
12—Georgia	35
7—N. C. State	14
7—Wake Forest	19
14—So. Carolina	26
14—Virginia Tech	7
13—Tulane	54
20—Furman	6
21—Auburn	13

147

174

COLBY

0—New Hampshire	13
6—Amherst	13
0—Bowdoin	6
6—Maine	14
0—Bates	6

12

52

COLGATE

6—Yale	27
9—Cornell	13
47—Kings Point	7
2—Penn State	6
39—Lafayette	0
6—Holy Cross	21
25—Syracuse	7
20—Brown	14

154

95

COLORADO

13—Iowa State	7
0—Texas	76
6—Utah State	6
20—Wyoming	0
7—Brigham Young	10
14—New Mexico	13
0—Utah	7
0—Missouri	21
13—Denver	13
18—Colo. A. & M.	0

91

153

COLUMBIA

13—Rutgers	7
23—Navy	14
28—Yale	20
14—Army	48
33—Dartmouth	13
0—Cornell	12
6—Penn	41
46—Lafayette	0
59—Syracuse	21

222

176

COLL. OF PACIFIC

6—Oregon	7
31—Williams A.A.B.	0
21—Santa Barbara	0
13—Arizona	47
13—Northwestern	26
13—Hawaii	19
0—San Jose	32
12—Fresno	6
31—Cal. Aggies	13
19—San Diego	13

159

163

*Unbeaten, but tied. †Unbeaten (lost to Toledo in postseason Glass Bowl game, 21-12).

CONNECTICUT

0—Harvard	7
25—Springfield	0
2—Wesleyan	7
21—Maine	20
0—Lehigh	10
27—Coast Guard	13
33—R. I. State	0
12—New Hampshire	12
120	69

CORNELL

21—Bucknell	0
21—Army	46
13—Colgate	9
6—Yale	6
14—Princeton	7
12—Columbia	0
7—Syracuse	14
21—Dartmouth	7
20—Penn	26
135	115

DARTMOUTH

3—Holy Cross	0
20—Syracuse	14
6—Pennsylvania	39
13—Brown	20
13—Columbia	33
2—Yale	33
7—Harvard	21
7—Cornell	21
20—Princeton	13
91	194

***DELAWARE**

25—Penn M. C.	0
53—Rand. Macon	0
44—W. Maryland	6
27—Gettysburg	6
52—Drexel	0
28—F. & M.	0
27—Bucknell	14
61—Wash. College	0
20—Muhlenberg	12
337	38

DENVER

7—Okla. A. & M.	40
13—Kansas	21
26—Brigham Young	13
33—Colorado Aggies	0
20—Utah	14
6—Texas Tech.	21
19—Wyoming	6
13—Colorado	13
28—Colorado Col.	6
14—Utah State	28
179	162

DETROIT

31—Wayne	0
32—Scranton	13
14—Holy Cross	13
18—S. Francisco	6
20—Tulsa	14
33—Drake	6
20—Marquette	21
6—Villanova	23
33—St. Louis	14
7—Miami (Fla.)	21
214	134

DICKINSON

7—Lehigh	6
2—Lebanon Valley	0
27—Susquehanna	0
7—W. & J.	19
14—Swarthmore	0
25—Western Md.	20
33—Allegheny	6
115	51

*Unbeaten.

DRAKE

26—St. Ambrose	13
7—Texas Mines	2
13—Tulsa	48
6—Wichita	12
6—St. Louis	27
6—Detroit	33
7—Iowa State	7
0—Iowa Tea.	46
7—Okla. A. & M.	59
78	247

DUKE

6—N. C. State	13
7—Tennessee	12
21—Navy	6
41—Richmond	0
0—Army	19
0—Georgia Tech	14
13—Wake Forest	0
39—So. Carolina	0
7—No. Carolina	22
134	86

F. AND M.

6—Swarthmore	7
49—C. C. N. Y.	0
7—Muhlenberg	40
0—Delaware	28
12—Albright	0
7—W. & J.	33
28—Ursinus	7
109	115

FLORIDA

7—Mississippi	13
13—Tulane	27
0—Vanderbilt	20
13—Miami	20
19—No. Carolina	40
14—Georgia	33
20—Villanova	27
6—N. C. State	37
12—Auburn	47
104	264

FORDHAM

7—Georgetown	8
2—St. Mary's	33
6—Kings Point	7
0—Penn State	68
0—West Virginia	39
28—N. Y. U.	33
0—L. S. U.	40
43	228

***GEORGIA**

35—Clemson	12
35—Temple	7
28—Kentucky	13
33—Okla. A. & M.	13
70—Furman	7
14—Alabama	0
33—Florida	14
41—Auburn	0
48—Chattanooga	27
35—Georgia Tech	7
372	100

GEORGIA TECH

9—Tennessee	13
32—V. M. I.	6
24—Mississippi	7
26—La. State	7
27—Auburn	6
14—Duke	0
28—Navy	20
35—Tulane	7
41—Furman	7
7—Georgia	35
243	108

GEORGETOWN

6—Wake Forest	19
6—Fordham	7
2—Villanova	19
13—St. Louis	7
18—Geo. Wash.	6
13—Boston College	20
35—Scranton	7
19—N. Y. U.	12
114	97

GEO. WASHINGTON

37—Kings Point	18
13—Rollins	0
20—Wayne	6
13—Rutgers	25
6—Georgetown	18
18—Citadel	0
0—W. & M.	20
107	87

GETTYSBURG

19—Lehigh	14
6—West Maryland	18
27—Lafayette	14
6—Delaware	27
7—N. Y. U.	12
0—Bucknell	19
7—Muhlenberg	13
34—Albright	0
26—Lab. Valley	6
132	123

***HARDIN-SIMMONS**

31—McMurray	0
21—Kansas State	7
34—San Jose State	7
49—New Mexico	0
46—Tempe (Arizona)	6
19—Arizona	8
28—West Texas State	7
29—Texas Mines	7
33—Howard Payne	0
21—Texas Tech.	6
311	48

HARVARD

7—Connecticut	0
49—Tufts	0
13—Princeton	12
69—Coast Guard	0
13—Holy Cross	6
0—Rutgers	13
21—Dartmouth	7
28—Brown	0
14—Yale	27
214	65

HAVERFORD

20—Susquehanna	6
7—Ursinus	0
20—Drexel	33
0—Wesleyan	33
40—Hamilton	14
7—Johns Hopkins	19
12—Swarthmore	13
106	118

HOBART

7—Buffalo	20
14—Trinity	21
7—Union	19
6—Hamilton	7
0—Niagara	25
12—Rochester	0
46	92

HOLY CROSS

0—Dartmouth	3
16—Detroit	14
13—Villanova	14
12—Syracuse	21
6—Harvard	13
21—Brown	19
21—Colgate	6
12—Temple	7
13—Boston College	6
114	103

IDAHO

0—Stanford	45
0—Wash. State	32
6—Marquette	46
14—San Jose St.	26
13—Oregon	26
0—Montana	19
0—Oregon State	34
20—Portland	6
12—Fresno State	13
65	247

ILLINOIS

33—Pittsburgh	7
6—Notre Dame	26
43—Purdue	7
7—Indiana	14
27—Wisconsin	21
13—Michigan	9
7—Iowa	0
16—Ohio State	7
20—Northwestern	0
172	91

INDIANA

6—Cincinnati	15
0—Michigan	21
21—Minnesota	0
14—Illinois	7
0—Iowa	13
27—Nebraska	7
20—Pittsburgh	6
7—Northwestern	6
34—Purdue	20
129	95

IOWA

39—N. Dakota State	0
16—Purdue	0
7—Michigan	14
21—Nebraska	7
13—Indiana	0
6—Notre Dame	41
0—Illinois	7
21—Wisconsin	7
6—Minnesota	16
129	92

IOWA STATE

7—Colorado	13
9—Northwestern	41
20—Iowa T.	14
8—Kansas	24
13—Missouri	33
0—Oklahoma	63
13—Kansas State	7
7—Drake	7
0—Nebraska	33
77	239

JOHNS HOPKINS

0—Rutgers	53
13—Wash. Col.	7
27—P. M. C.	0
24—Randolph-Macon	8
7—Drexel	0
7—Swarthmore	6
19—Haverford	7
0—Buffalo	36
90	117

KANSAS

0—T. C. U.	0
21—Denver	13
14—Wichita	7
24—Iowa State	8
14—Nebraska	16
0—Tulsa	56
14—Okla. A. & M.	13
16—Oklahoma	13
34—Kansas State	0
20—Missouri	19
57	145

KANSAS STATE

7—Hardin-Simm	21
0—Nebraska	31
0—Missouri	26
7—Oklahoma	28
7—Iowa State	13
6—San Francisco	38
0—Kansas	34
7—New Mexico	14
7—Arizona	28
41	233

KENTUCKY

20—Mississippi	6
26—Cincinnati	7
70—Xavier	0
13—Georgia	28
7—Vanderbilt	10
7—Alabama	21
39—Mich. State	14
35—Marquette	7
13—West Virginia	0
0—Tennessee	7
233	97

LAFAYETTE

20—Muhlenberg	32
0—Pennsylvania	66
14—Gettysburg	27
7—W. & J.	6
0—Bucknell	29
0—Colgate	39
2—Rutgers	41
0—Columbia	46
13—Lehigh	0
56	286

LEHIGH

7—Kings Point	0
14—Gettysburg	19
6—Dickinson	7
10—Connecticut	0
7—Muhlenburg	40
3—N. Y. U.	13
6—Rutgers	55
0—Lafayette	13
53	147

LOUISIANA STATE

7—Rice	6
13—Miss. State	6
33—Texas A. & M.	9
7—Ga. Tech	26
14—Vanderbilt	0
34—Mississippi	21
31—Alabama	21
20—Miami	7
40—Fordham	0
41—Tulane	27
240	123

MAINE

13—R. I. State	14
7—Northeastern	13
0—New Hampshire	21
20—Connecticut	27
4—Bates	7
14—Colby	6
23—Bowdoin	7
81	95

MARQUETTE

0—Wisconsin	34
26—St. Louis	0
13—Villanova	26
46—Iadha	6
6—Pittsburgh	7
20—Arizona	0
21—Detroit	20
7—Kentucky	35
0—Mich. State	20
139	148

MARYLAND

54—Bainbridge	0
7—Richmond	37
0—North Carolina	33
6—Va. Tech	0
7—Wm. & Mary	41
17—So. Carolina	21
24—W. & L.	7
14—Mich. State	26
7—N. C. State	28
136	193

MASS. STATE

0—Bates	6
1—Bowdoin	8
39—Worcester Tech.	0
6—R. I. State	14
14—Norwich	0
28—Vermont	20
59—C. C. N. Y.	0
27—Tufts	0
184	48

MIAMI (Fla.)

13—Wm. & Mary	3
0—North Carolina	21
20—T. C. U.	12
20—Florida	13
33—Chattanooga	13
26—Villanova	21
20—Miami (Ohio)	17
7—La. State	20
40—W. & L.	20
21—Detroit	7
200	147

MICHIGAN

21—Indiana	0
14—Iowa	7
13—Army	20
14—Northwestern	14
9—Illinois	13
21—Minnesota	0
55—Mich. State	7
28—Wisconsin	6
58—Ohio State	6
233	73

MICHIGAN STATE

42—Wayne	0
20—Boston College	34
0—Miss. State	6
19—Penn State	16
7—Cincinnati	18
14—Kentucky	35
7—Michigan	59
20—Marquette	0
26—Maryland	14
26—Wash. State	20
233	181

MIDDLEBURY

6—Williams	12
7—Trinity	28
0—Wesleyan	26
13—St. Lawrence	20
12—Norwich	13
18—Union	13
12—Vermont	12
240	111

MINNESOTA

33—Nebraska	6
0—Indiana	21
7—Northwestern	14
46—Wyoming	0
9—Ohio State	39
0—Michigan	21
13—Purdue	7
16—Iowa	6
6—Wisconsin	0
130	114

MISSISSIPPI

6—Kentucky	20
13—Florida	7
0—Vanderbilt	7
7—Ga. Tech	24
6—La. Tech	7
9—Arkansas	7
21—La. State	34
14—Tennessee	18
0—Miss. State	20
76	144

MISS. STATE

41—Chattanooga	7
6—La. State	13
6—Michigan State	0
48—San Francisco	20
14—Tulane	7
69—Murray T.	0
33—Auburn	0
27—N. W. La.	0
20—Mississippi	0
7—Alabama	24
271	71

MISSOURI

0—Texas	42
13—Ohio State	13
19—St. Louis	14
26—Kansas State	0
33—Iowa State	13
0—So. Methodist	17
21—Nebraska	20
21—Colorado	0
6—Oklahoma	27
19—Kansas	20
158	166

MONTANA

26—Colorado A. & M.	0
31—East Washington	7
0—Oregon	34
20—Montana State	7
7—Utah State	27
13—Idaho	0
7—U. C. L. A.	61
0—Washington	21
110	157

*MORGAN STATE

22—Delaware State	6
13—West Va. State	12
35—Grambling	0
28—Lincoln (Pa.)	0
12—No. Car. A. & T.	6
15—Bluefield Tea	6
20—Hampton	0
6—Virginia State	0
151	31

†MUHLENBERG

32—Lafayette	20
39—Albright	0
6—Bucknell	0
52—Swarthmore	13
40—F. & M.	7
40—Lehigh	7
13—Gettysburg	7
47—Moravian	0
12—Delaware	20
281	74

NAVY

7—Villanova	0
14—Columbia	23
6—Duke	21
14—No. Carolina	21
19—Penn	32
0—Notre Dame	28
20—Georgia Tech	28
7—Penn State	12
18—Army	21
105	186

NEBRASKA

6—Minnesota	33
31—Kansas State	0
7—Iowa	21
16—Kansas	14
7—Indiana	27
20—Missouri	21
33—Iowa State	0
6—Oklahoma	27
0—U. C. L. A.	18
126	161

NEVADA

14—San Francisco	26
33—Santa Clara	7
74—Ariz. (Tempe) St.	2
26—San Diego State	0
12—St. Mary's	13
38—Montana State	14
48—Santa Barbara	13
53—Loyola	0
26—Hawaii	7
324	82

NEW HAMPSHIRE

13—Colby	0
25—R. I. State	12
27—Maine	0
6—Springfield	14
39—Vermont	0
26—Northeastern	0
13—Boston U.	7
12—Connecticut	12
161	45

N. Y. U.

19—Brooklyn	8
0—Rutgers	26
6—Rochester	0
12—Gettysburg	7
6—Boston College	72
13—Lehigh	3
33—Fordham	28
12—Georgetown	19
101	163

NORTH CAROLINA

14—Va. Tech	14
21—Miami	0
33—Maryland	0
21—Navy	14
40—Florida	19
14—Tennessee	20
21—W. & M.	7
26—Wake Forest	14
22—Duke	7
49—Virginia	14
261	109

N. C. STATE

13—Duke	6
14—Clemson	7
25—Davidson	0
14—Wake Forest	6
6—Va. Tech	14
49—V. M. I.	7
0—Vanderbilt	7
27—Virginia	6
37—Florida	6
28—Maryland	7
213	67

NORTHWESTERN

41—Iowa State	9
28—Wisconsin	0
14—Minnesota	7
14—Michigan	14
26—Coll. of Pacific	13
27—Ohio State	39
6—Indiana	7
0—Notre Dame	27
0—Illinois	20

156 136

*NOTRE DAME

26—Illinois	6
33—Pittsburgh	0
49—Purdue	6
41—Iowa	6
28—Navy	0
0—Army	0
27—Northwestern	0
41—Tulane	0
26—So. Calif.	6

271 24

OHIO STATE

13—Missouri	13
21—So. Calif.	0
7—Wisconsin	20
14—Purdue	14
39—Minnesota	9
39—Northwestern	27
20—Pittsburgh	13
7—Illinois	16
6—Michigan	58

166 170

OKLAHOMA

7—Army	21
10—Texas A. & M.	7
10—Texas	20
28—Kansas State	7
63—Iowa State	0
14—T. C. U.	12
13—Kansas	16
27—Missouri	6
27—Nebraska	6
73—Okla. A. & M.	12

275 107

OKLA. A. & M.

40—Denver	7
21—Arkansas	21
6—Texas	54
6—So. Methodist	15
13—Georgia	33
7—T. C. U.	6
13—Kansas	14
18—Tulsa	20
7—Texas Tech	14
59—Drake	7
12—Oklahoma	73

202 264

OREGON

7—Coll. of Pacific	6
14—California	13
34—Montana	0
0—Wash. State	0
26—Idaho	13
0—So. Calif.	43
0—U. C. L. A.	14
0—Washington	16
0—Oregon State	13

81 118

OREGON STATE

7—U. C. L. A.	50
35—Portland	0
6—So. Calif.	0
13—Washington State	12
3—Stanford	0
34—Idaho	0
28—California	7
13—Oregon	0
21—Washington	12

157 81

PENNSYLVANIA

66—Lafayette	0
39—Dartmouth	6
40—Virginia	0
32—Navy	19
14—Princeton	17
41—Columbia	6
7—Army	34
26—Cornell	20

265 102

PENN STATE

49—Bucknell	6
9—Syracuse	0
16—Mich. State	19
6—Colgate	2
68—Fordham	0
26—Temple	0
12—Navy	7
7—Pittsburgh	14

192 48

PITTSBURGH

7—Illinois	33
33—West Virginia	7
0—Notre Dame	33
0—Temple	0
7—Marquette	6
6—Purdue	10
6—Indiana	10
13—Ohio State	20
14—Penn State	7

88 136

PRINCETON

33—Brown	12
12—Harvard	13
0—Rutgers	7
7—Cornell	14
17—Penn	14
6—Virginia	20
2—Yale	30
13—Dartmouth	20

104 130

PURDUE

13—Miami (Ohio)	7
0—Iowa	16
7—Illinois	43
6—Notre Dame	49
14—Ohio State	14
10—Pittsburgh	8
20—Wisconsin	24
7—Minnesota	13
20—Indiana	34

97 208

RHODE ISLAND

14—Maine	13
12—New Hampshire	25
0—Brown	29
14—Mass. State	6
6—Boston U.	39
0—Connecticut	33

46 145

RICE

6—La. State	7
48—Southwestern	0
25—Tulane	6
21—S. M. U.	7
18—Texas	13
41—Texas Tech	6
0—Arkansas	7
27—Texas A. & M.	10
13—T. C. U.	0
38—Baylor	6

237 62

RICHMOND

46—Rand.-Macon	0
7—V. M. I.	7
37—Maryland	7
33—Hamp.-Sydney	6
0—Duke	41
20—W. & L.	0
19—Virginia	6
27—Davidson	7
7—V. P. I.	7
0—W. & M.	40

196 121

R. P. I.

0—Coast Guard	33
13—Buffalo	28
6—Williams	0
7—Union	27
7—Ithaca	16
7—Rochester	7
13—Amherst	0
26—Brooklyn	6

79 117

ROCHESTER

6—Clarkson	7
30—Union	14
32—DePauw	6
0—N. Y. U.	6
41—Hamilton	14
7—R. P. I.	7
6—Vermont	10
0—Hobart	12

122 85

RUTGERS

7—Columbia	13
53—Johns Hopkins	0
26—N. Y. U.	0
7—Princeton	14
25—Geo. Wash.	13
19—Harvard	0
41—Lafayette	2
55—Lehigh	6
25—Bucknell	0

252 48

ST. BONAVENTURE

14—Youngstown	20
33—Scranton	7
29—Niagara	7
26—St. Vincent	0
13—Canisius	0
13—Bowling Green	9
26—Kings Point	0

154 43

ST. LAWRENCE

14—Union	0
39—Lowell Textile	0
7—Clarkson	0
7—Ithaca	0
20—Middlebury	13
13—Cortland	14
0—Springfield	24

100 51

ST. LOUIS

24—Missouri Mines	0
0—Marquette	26
14—Missouri	19
7—Auburn	27
27—Drake	6
7—Georgetown	13
41—So. Dakota	7
0—Wichita	13
14—Detroit	33
36—Bradley	20

170 164

ST. MARY'S (Calif.)

24—Washington	20
73—Alameda NAS	0
13—California	20
33—Fordham	7
13—Nevada	12
20—U. C. L. A.	48
28—Santa Clara	19
6—San Francisco	0

210 118

SANTA CLARA

7—Fresno State	20
7—Nevada	33
6—Portland	33
26—Stanford	0
7—U. C. L. A.	13
19—San Francisco	33
21—Arizona	21
19—St. Mary's	28

112 181

SAN FRANCISCO

26—Nevada	14
7—Stanford	33
6—Detroit	18
20—Mississippi State	48
13—Santa Clara	19
38—Kansas State	7
13—Utah	21
39—Wyoming	7
0—St. Mary's	6

162 172

SOUTH CAROLINA

21—Newberry	0
6—Alabama	14
14—Furman	7
26—Clemson	14
19—Citadel	7
21—Maryland	14
0—Duke	39
0—Wake Forest	33

107 135

SO. CALIFORNIA

13—Wash. State	0
0—Ohio State	21
0—Oregon State	0
28—Washington	0
28—Stanford	20
43—Oregon	0
14—California	0
6—U. C. L. A.	12
6—Notre Dame	26
20—Tulane	13

158 100

SO. METHODIST

7—Temple	7
0—Texas Tech	7
15—Okla. A. & M.	6
7—Rice	21
17—Missouri	0
3—Texas	19
0—Texas A. & M.	13
0—Arkansas	13
35—Baylor	0
30—T. C. U.	13

114 100

STANFORD

45—Idaho	0
33—San Francisco	7
6—U. C. L. A.	20
33—Santa Clara	20
20—So. Calif.	28
0—Oregon State	21
15—Washington	21
27—Wash. State	26
25—California	0

204 140

*Unbeaten, but tied.

SUSQUEHANNA		TEXAS CHRISTIAN		UNION		V. P. I.	
13—C. C. N. Y.	7	0—Kansas	0	0—St. Lawrence	14	14—North Carolina	14
6—Haverford	20	19—Baylor	16	14—Rochester	30	21—Virginia	21
0—Dickinson	27	12—Arkansas	34	0—Vermont	32	0—Wm. & Mary	49
9—Juniata	0	12—Miami	0	27—R. P. I.	7	0—Maryland	6
13—Hartwick	26	0—Texas A. & M.	14	19—Hobart	7	14—N. C. State	6
27—Wagner	6	6—Okla. A. & M.	7	14—Williams	0	7—Clemson	14
		12—Oklahoma	14	13—Middlebury	18	13—W. and L.	7
68	86	14—Texas	14	6—Hamilton	7	7—Richmond	7
		0—Rice	13			20—V. M. I.	7
		13—So. Methodist	30	93	115		
		90	148			96	131
SWARTHMORE		TEXAS TECH		*U. C. L. A.		WAGNER	
0—Wesleyan	26	26—West Texas	14	50—Oregon State	7	20—Lowell Textile	7
7—F. & M.	6	6—Texas A. & M.	0	39—Washington	13	19—Brooklyn	25
13—Muhlenberg	52	7—So. Methodist	0	26—Stanford	6	6—C. C. N. Y.	27
19—Ursinus	12	6—Tulsa	21	13—California	6	0—Kings Point	60
0—Dickinson	14	13—Baylor	6	33—Santa Clara	7	6—Susquehanna	27
6—Johns Hopkins	0	21—Denver	6	46—St. Mary's	20	0—Hartwick	34
12—Drexel	6	6—Rice	41	14—Oregon	0	0—West Chester	32
13—Haverford	12	27—New Mexico	0	61—Montana	7		
		14—Okla. A. & M.	7	13—So. Calif.	6		
70	128	16—Arizona	0	18—Nebraska	0	51	212
		6—Hard-Simmons	21	313	72		
SYRACUSE		TRINITY		UTAH		WAKE FOREST	
41—Boston U.	6	0—Bates	25	36—New Mexico	14	12—Boston College	6
14—Dartmouth	20	28—Middlebury	7	14—Arizona	7	19—Georgetown	6
0—Penn State	9	21—Hobart	14	35—Brig. Young	6	19—Clemson	7
21—Holy Cross	12	19—Williams	7	14—Denver	20	6—N. C. State	14
0—West Virginia	13	26—Norwich	0	27—Wyoming	7	19—Tennessee	6
28—Temple	7	14—Wesleyan	21	7—Colorado	0	32—Chattanooga	14
14—Cornell	7			13—Col. A. & M.	0	0—Duke	13
7—Colgate	25	108	74	21—San Francisco	13	14—North Carolina	26
21—Columbia	59			14—Utah State	22	35—So. Carolina	0
1146	158			181	89	156	92
TEMPLE		TUFTS		VANDERBILT		WASHINGTON	
7—So. Methodist	7	0—Harvard	49	35—Tennessee Tech	7	20—St. Mary's	24
7—Georgia	35	6—Bates	19	7—Mississippi	0	13—U. C. L. A.	39
0—Pittsburgh	0	0—Boston U.	35	20—Florida	10	21—Wash. State	7
6—West Virginia	0	6—Northeastern	7	7—Kentucky	10	0—So. Calif.	28
7—Syracuse	28	20—Amherst	25	0—La. State	14	20—California	6
0—Penn State	26	18—Coast Guard	13	7—N. C. State	0	21—Stanford	15
27—Bucknell	12	0—Mass. State	27	7—Alabama	12	16—Oregon	0
7—Holy Cross	12	50	175	6—Tennessee	7	21—Montana	0
61	114			108	50	12—Oregon State	21
TENNESSEE		TULANE		VILLANOVA		144	140
13—Ga. Tech	9	6—Alabama	7	40—Kings Point	6	W. AND J.	
12—Duke	7	27—Florida	13	0—Army	35	6—Bethany	0
47—Chattanooga	7	6—Rice	25	0—Navy	7	6—Geneva	12
12—Alabama	0	32—Auburn	0	26—Marquette	13	6—Denison	12
6—Wake Forest	19	7—Miss. State	14	14—Holy Cross	13	6—Lafayette	7
20—North Carolina	14	54—Clemson	13	19—Georgetown	2	19—Dickinson	7
18—Mississippi	14	7—Georgia Tech	35	12—Boston College	14	48—Carnegie	0
33—Boston College	13	0—Notre Dame	41	21—Miami	6	26—Muskingum	7
7—Kentucky	0	27—La. State	41	23—Detroit	20	33—F. and M.	7
7—Vanderbilt	6	13—So. Calif.	20	27—Florida	6	150	52
175	89	179	209	182	142		
TEXAS		TULSA		VIRGINIA		W. & L.	
42—Missouri	0	33—Wichita	13	71—Hamp.-Sydney	0	41—Hamp.-Sydney	6
76—Colorado	0	52—N. Mex. A. & M.	0	21—Va. Tech	21	0—West Virginia	6
54—Okla. A. & M.	6	48—Drake	13	19—V. M. I.	6	18—Wm. & Mary	34
20—Oklahoma	13	6—Texas Tech.	6	0—Penn	40	0—Richmond	20
20—Arkansas	0	14—Detroit	20	7—Richmond	19	25—Davidson	6
13—Rice	18	56—Kansas	0	20—Princeton	6	7—Va. Tech.	13
19—So. Methodist	3	20—Cincinnati	0	7—N. C. State	27	7—Maryland	24
22—Baylor	7	20—Okla. A. & M.	18	14—West Virginia	0	20—Miami	40
0—Texas Christian	14	17—Baylor	41	21—No. Carolina	49		
24—Texas A. & M.	7	14—Arkansas	13	180	170	118	149
290	68	295	83				
TEXAS A. & M.		TUSKEGEE		V. M. I.		WASH. STATE	
47—No. Texas State	0	56—25th Combat Team	0	21—Catawba	7	7—So. Calif.	13
0—Texas Tech.	6	59—Philander Smith	0	7—Richmond	7	32—Idaho	0
7—Oklahoma	10	21—Grambling	6	6—Ga. Tech.	32	7—Washington	21
9—La. State	33	33—Clark	0	8—Virginia	19	0—Oregon	0
14—Texas Christian	0	14—Wilberforce	7	25—Davidson	0	12—Oregon State	13
12—Baylor	0	13—Fisk	0	0—Wm. & Mary	41	14—California	47
0—Arkansas	7	15—Morehouse	0	7—N. C. State	49	26—Stanford	27
14—So. Methodist	0	21—Wiley	6	26—Furman	7	20—Mich. State	26
10—Rice	27	12—Florida A. & M.	21	26—Citadel	7		
7—Texas	24	30—So. Carolina State	14	7—Va. Tech.	20	118	147
125	107	230	68	133	189		

*Unbeaten.

*WESLEYAN		WEST VIRGINIA		WILLIAMS		WYOMING	
26—Swarthmore	0	13—Otterbein	7	12—Middlebury	6	7—Colo. State	0
7—Connecticut	2	7—Pittsburgh	33	0—R. P. I.	6	7—Colo. Mines	2
26—Middlebury	0	42—Waynesburg	0	0—Bowdoin	26	0—Colo. Agricult.	2
46—Amherst	13	6—W. & L.	0	7—Trinity	19	0—Colorado	20
33—Haverford	0	0—Temple	6	0—Union	14	0—Minnesota	40
6—Williams	0	13—Syracuse	0	0—Wesleyan	6	7—Utah	27
21—Trinity	14	0—Army	19	21—Amherst	13	3—Brig. Young	0
165	29	39—Fordham	0	40	90	6—Denver	15
		0—Kentucky	13			7—Utah State	27
		0—Virginia	21			7—San Francisco	35
		120	99			44	18
WEST. MARYLAND		WM. & MARY		WISCONSIN		YALE	
19—Gettysburg	6	61—Fort McClellan	0	34—Marquette	0	33—Kings Point	0
6—Delaware	44	3—Miami	13	28—California	7	27—Colgate	0
13—Wash. College	6	51—Citadel (The)	12	0—Northwestern	28	20—Columbia	20
38—Hamp. Sydnay	6	49—Va. Tech.	0	20—Ohio State	7	6—Cornell	1
27—Randolph-Macon	0	41—V. M. I.	18	21—Illinois	27	47—Coast Guard	1
20—Dickinson	25	41—Maryland	7	24—Purdue	20	33—Dartmouth	2
46—Mt. St. Mary	7	7—No. Carolina	21	7—Iowa	21	45—Brown	0
168	93	20—Geo. Wash.	21	6—Michigan	28	30—Princeton	0
		40—Richmond	0	0—Minnesota	6	27—Harvard	14
		347	71	140	144	272	72

*Unbeaten.

Professional

NATIONAL FOOTBALL LEAGUE CHAMPIONS

Source: George Strickler, Director of Public Relations, National Football League.

Year	Team	Won	Lost	Tied	Pct.	Year	Team	Won	Lost	Tied	Pct.
1921	Bears (Staley's)	10	1	1	.909	1937	*Washington Redskins (E)	8	3	0	.727
1922	Canton Bulldogs	10	0	2	1.000	1937	Chicago Bears (W)	9	1	1	.900
1923	Canton Bulldogs	11	0	1	1.000	1938	*New York Giants (E)	8	2	1	.800
1924	Cleveland Bulldogs	7	1	1	.875	1938	Green Bay Packers (W)	8	3	0	.727
1925	Chicago Cardinals	11	2	1	.846	1939	*Green Bay Packers (W)	9	2	0	.818
1926	Frankford Yellow Jackets	14	1	1	.933	1939	New York Giants (E)	9	1	1	.900
1927	New York Giants	11	1	1	.917	1940	*Chicago Bears (W)	8	3	0	.727
1928	Providence Steamrollers	8	1	2	.888	1940	Washington Redskins (E)	9	2	0	.818
1929	Green Bay Packers	12	0	1	1.000	1941	*Chicago Bears (W)	10	1	0	.909
1930	Green Bay Packers	11	3	1	.786	1941	New York Giants (E)	8	3	0	.727
1931	Green Bay Packers	12	2	0	.857	1942	*Washington Redskins (E)	10	1	0	.909
1932	Chicago Bears	7	1	6	.875	1942	Chicago Bears (W)	11	0	0	1.000
1933	*Chicago Bears (W)	10	2	1	.833	1943	*Chicago Bears (W)	8	1	1	.889
1933	New York Giants (E)	11	3	0	.786	1943	Washington Redskins (E)	6	3	1	.667
1934	*New York Giants (E)	8	5	0	.615	1944	*Green Bay Packers (W)	8	2	0	.800
1934	Chicago Bears (W)	13	0	0	1.000	1944	New York Giants (E)	8	1	1	.889
1935	*Detroit Lions (W)	7	3	2	.700	1945	*Cleveland Rams (W)	9	1	0	.900
1935	New York Giants (E)	9	3	0	.750	1945	Washington Redskins (E)	8	2	0	.800
1936	*Green Bay Packers (W)	10	1	1	.909	1946	*Chicago Bears (W)	8	2	1	.800
1936	Boston Redskins (E)	7	5	0	.587	1946	New York Giants (E)	7	3	1	.700

*Won title in play-offs. (W) Western Division champion. (E) Eastern Division champion.

CHAMPIONSHIP PLAY-OFF RESULTS

1933 Chicago Bears 23, New York Giants 21.
 1934 New York Giants 30, Chicago Bears 13.
 1935 Detroit Lions 26, New York Giants 7.
 1936 Green Bay Packers 21, Boston Redskins 6.
 1937 Washington Redskins 28, Chicago Bears 21.
 1938 New York Giants 23, Green Bay Packers 17.
 1939 Green Bay Packers 27, New York Giants 0.

1940 Chicago Bears 73, Washington Redskins 0.
 1941 Chicago Bears 37, New York Giants 9.
 1942 Washington Redskins 14, Chicago Bears 6.
 1943 Chicago Bears 41, Washington Redskins 21.
 1944 Green Bay Packers 14, New York Giants 7.
 1945 Cleveland Rams 15, Washington Redskins 14.
 1946 Chicago Bears 24, New York Giants 14.

NATIONAL LEAGUE STANDING, 1946

(Final)

EASTERN DIVISION

	Won	Lost	Tied	Pct.	Points For	Points Against
New York Giants	7	3	1	.700	236	166
Philadelphia Eagles	6	5	0	.545	235	220
Washington Redskins	5	5	1	.500	171	191
Pittsburgh Steelers	5	5	1	.500	136	117
Boston Yanks	2	8	1	.200	189	273

WESTERN DIVISION

	Won	Lost	Tied	Pct.	Points For	Points Against
Chicago Bears	8	2	1	.800	289	19
Los Angeles Rams	6	4	1	.600	277	24
Chicago Cardinals	6	5	0	.545	260	19
Green Bay Packers	6	5	0	.545	138	15
Detroit Lions	1	10	0	.091	142	310

ALL-AMERICA CONFERENCE STANDINGS, 1946

(Final)

EASTERN DIVISION

	Won	Lost	Tied	Pct.	Points For	Points Against
*New York Yankees	10	3	1	.769	270	192
Brooklyn Dodgers	3	10	1	.231	226	339
Buffalo Bisons	3	10	1	.231	249	370
Miami Seahawks	3	11	0	.214	167	378

*Divisional champions. Cleveland defeated New York in championship play-off, 14 to 9.

WESTERN DIVISION

	Won	Lost	Tied	Pct.	Points For	Points Against
*Cleveland Browns	12	2	0	.857	423	137
San Francisco 49ers	9	5	0	.643	307	189
Los Angeles Dons	7	5	2	.583	305	290
Chicago Rockets	5	6	3	.455	263	315

PROFESSIONAL TEAM RECORDS, 1946

National League

(Final regular season records)

BOSTON		LOS ANGELES	
0—New York	17	14—Philadelphia	25
25—Philadelphia	49	21—Green Bay	7
7—Pittsburgh	16	28—Chi. Bears	28
6—Washington	14	35—Detroit	14
7—Pittsburgh	33	10—Chi. Cards	34
14—Chi. Cards	17	41—Detroit	20
14—Washington	28	21—Chi. Bears	27
28—New York	12	17—Chi. Cards	14
40—Los Angeles	21	21—Boston	40
34—Detroit	10	31—New York	21
14—Philadelphia	40	38—Green Bay	17
189	273	277	247

CHICAGO BEARS

30—Green Bay	7	17—Boston	0
34—Chi. Cards	17	17—Pittsburgh	14
28—Los Angeles	28	14—Washington	24
21—Philadelphia	14	28—Chi. Cards	24
0—New York	14	14—Chi. Bears	28
10—Green Bay	7	14—Philadelphia	17
27—Los Angeles	21	45—Philadelphia	28
24—Washington	20	28—Boston	0
42—Detroit	6	7—Pittsburgh	0
28—Chi. Cards	35	21—Los Angeles	31
45—Detroit	24	31—Washington	0
289	193	236	166

CHICAGO CARDS

7—Pittsburgh	14	25—Los Angeles	14
34—Detroit	14	49—Boston	25
17—Chi. Bears	34	7—Green Bay	19
36—Detroit	14	14—Chi. Bears	21
24—New York	28	28—Washington	24
34—Los Angeles	10	28—New York	14
28—Boston	14	17—New York	10
7—Green Bay	19	7—Pittsburgh	10
14—Los Angeles	17	10—Washington	27
24—Green Bay	6	10—Pittsburgh	14
35—Chi. Bears	28	40—Boston	14
260	198	235	220

DETROIT

14—Chi. Cards	34	14—Chi. Cards	7
16—Washington	17	14—Washington	14
14—Chi. Cards	36	14—New York	17
14—Los Angeles	35	16—Boston	7
7—Green Bay	10	7—Green Bay	17
20—Los Angeles	41	33—Boston	7
17—Pittsburgh	9	14—Washington	7
0—Green Bay	42	7—Detroit	17
6—Chi. Bears	34	10—Philadelphia	7
10—Boston	34	0—New York	7
24—Chicago Bears	45	7—Philadelphia	10
142	310	136	117

GREEN BAY

7—Chi. Bears	30	14—Pittsburgh	14
7—Los Angeles	21	17—Detroit	16
19—Philadelphia	7	24—New York	14
17—Pittsburgh	7	14—Boston	28
10—Detroit	7	24—Philadelphia	14
7—Chi. Bears	10	7—Pittsburgh	14
19—Chi. Cards	7	17—Boston	14
9—Detroit	0	20—Chi. Bears	24
6—Chi. Cards	24	27—Philadelphia	10
20—Washington	7	7—Green Bay	20
17—Los Angeles	38	0—New York	31
138	158	171	191

WASHINGTON

All-America Conference

(Final regular season records)

BROOKLYN		LOS ANGELES	
27—Buffalo	14	20—Brooklyn	14
14—Los Angeles	20	30—Miami	14
13—San Francisco	32	21—Buffalo	21
7—Cleveland	26	21—Chicago	9
21—Chicago	21	14—San Francisco	23
10—New York	21	14—Cleveland	31
30—Miami	7	17—New York	31
21—Chicago	14	17—Cleveland	16
14—Buffalo	17	12—New York	17
14—Los Angeles	30	19—Brooklyn	14
14—San Francisco	21	34—Miami	21
7—New York	21	62—Buffalo	14
14—Cleveland	66	7—San Francisco	48
20—Miami	31	17—Chicago	17
226	339	305	290

BUFFALO

14—Brooklyn	27	0—Cleveland	44
10—New York	21	14—San Francisco	21
0—Cleveland	28	14—Los Angeles	30
35—Chicago	38	7—San Francisco	34
21—Los Angeles	21	17—Buffalo	14
13—New York	21	2—Chicago	28
14—Miami	17	7—Brooklyn	30
17—San Francisco	14	21—New York	24
49—Chicago	17	7—Chicago	20
14—San Francisco	14	21—Buffalo	14
17—Brooklyn	21	21—Los Angeles	34
14—Miami	42	0—Cleveland	34
17—Cleveland	62	0—New York	31
14—Los Angeles	62	31—Brooklyn	20
249	370	167	378

CHICAGO

6—Cleveland	20	21—San Francisco	7
17—New York	17	21—Buffalo	10
38—Buffalo	35	17—Chicago	17
24—San Francisco	7	7—Cleveland	24
9—Los Angeles	21	21—Buffalo	13
21—Brooklyn	21	0—Cleveland	7
28—Miami	7	0—Brooklyn	10
17—Buffalo	49	31—Los Angeles	17
14—Brooklyn	21	24—Miami	21
20—Miami	51	17—Los Angeles	12
14—Cleveland	28	10—San Francisco	9
38—New York	28	28—Chicago	38
0—San Francisco	17	21—Brooklyn	7
17—Los Angeles	14	31—Miami	0
263	315	270	192

CLEVELAND

44—Miami	0	21—New York	21
20—Chicago	6	7—Miami	14
28—Buffalo	0	32—Brooklyn	13
24—New York	7	7—Chicago	24
26—Brooklyn	7	34—Miami	7
7—New York	0	23—Los Angeles	17
31—Los Angeles	14	14—Buffalo	14
20—San Francisco	34	34—Cleveland	20
16—Los Angeles	17	7—Buffalo	14
14—San Francisco	7	7—Cleveland	14
51—Chicago	14	9—New York	10
42—Buffalo	17	30—Brooklyn	14
34—Miami	14	0—Chicago	0
66—Brooklyn	14	48—Los Angeles	7
423	137	307	189

SAN FRANCISCO

Noted Nicknames in Sports

BASEBALL

Big Six—Christy Mathewson
 Big Train—Walter Johnson
 Peerless Leader—Frank Chance
 Georgia Peach—Ty Cobb
 Prince Hal—Hal Chase
 Iron Man—Joe McGinnity
 Fordham Flash—Frankie Frisch
 Miracle Man—George Stallings
 Rabbit—Walter Maranville
 Little Napoleon—John McGraw
 Mite Manager—Miller Huggins
 Cactus—Clifford C. Cravath
 Rajah—Rogers Hornsby
 Sultan of Swat—Babe Ruth
 The Cat—Harry Brecheen
 \$100,000 infield—Stuffy McInnis, Eddie Collins, Jack Barry and Frank Baker of the Philadelphia Athletics
 Three-fingered—Mordecai Brown
 Gray Eagle—Tris Speaker
 Kiki—Hazen Cuyler
 Jughandle—Johnny Morrison
 Old Hoss—Riggs Stephenson, Charlie Radbourne
 Country—Enos Slaughter
 Billy The Kid—Billy Southworth
 Wild Horse of the Osage—Pepper Martin
 Mule—George Haas
 Camera Eye—Max Bishop
 Dem Bums—Brooklyn Dodgers
 Yankee Clipper—Joe DiMaggio
 Little Professor—Dom DiMaggio
 Mr. Shortstop—Marty Marion
 Beauty—Dave Bancroft
 Arkansas Traveler—Travis Jackson
 Wahoo Sam—Sam Crawford
 Gashouse Gang—St. Louis Cards of the mid-Thirties
 Meal Ticket—Carl Hubbell
 Old Fox—Clark Griffith
 High Pockets—George Kelly
 Goose—Leon Goslin
 Hitless Wonders—Chicago White Sox of 1906
 Flying Dutchman—Hans Wagner
 Old Roman—Charles A. Comiskey
 Home Run—Frank Baker
 The Crab—Johnny Evers
 Pants—Clarence Rowland
 Duster—Walter Mails
 Memphis Bill—William Terry
 Iron Horse—Lou Gehrig
 'Oom Paul—Paul Derringer
 The Lip—Leo Durocher
 King Kong—Charlie Keller
 The Old Arbiter—Bill Klem
 Ol' Pete—Grover Cleveland Alexander
 \$100,000 Battery—Grover C. Alexander and Bill Killifer
 Big Poison—Paul Waner
 Little Poison—Lloyd Waner
 Turkey Mike—Mike Donlin
 Me an' Paul—Dizzy and Daffy Dean
 Wildfire—Frank Schulte
 Mad Russian—Lou Novikoff

FOOTBALL

Four Horsemen—Jim Crowley, Harry Stuhldreher, Elmer Layden and Don Miller of Notre Dame
 Galloping Ghost—Red Grange
 Seven Blocks of Granite—Fordham line of 1936
 Automatic Jack—Jack Manders
 Seven Mules—Notre Dame line of 1924
 Little Boy Blue—Albie Booth
 Gloomy Gil—Gilmour Dobie
 Mr. Inside—Felix (Doc) Blanchard
 Mr. Outside—Glenn Davis
 Greasy—Earle Neale
 Hurry-up—Fielding H. Yost

BOXING

Manassa Mauler—Jack Dempsey
 Man Mountain—Jess Willard
 The Orchid Man—Georges Carpentier
 Wild Bull of the Pampas—Luis Angel Firpo
 Pittsburgh Windmill—Harry Greb
 Gentleman Jim—James J. Corbett
 Boston Tar Baby—Sam Langford
 Li'l Arthur—Jack Johnson
 Durable Dane—Battling Nelson
 Ruby Robert—Bob Fitzsimmons
 Boston Strong Boy—John L. Sullivan
 Basque Woodchopper—Paulino Uzcudun
 Fargo Express—Billy Petrolle
 Leaning Tower of Pisa and Tall Tower of Gorgonzola—Primo Carnera
 Brown Bomber—Joe Louis
 Two-ton Tony—Tony Galento
 Fainting Phil—Phil Scott
 Boy Bandit—James J. Johnston

TENNIS

Little Miss Poker Face—Helen Wills Moody
 Roark
 Bounding Basque of Biarritz—Jean Borotra
 The California Comet—Maurice McLoughlin
 Three Musketeers—Jean Borotra, Rene LaCoste, and Henri Cochet

HORSE RACING

Big Red—Man o' War
 Old Bones—Exterminator
 Mr. Longtail—Whirlaway
 The Iceman—George Woolf

Miscellaneous

Strangler—Ed Lewis
 Human Fish—Johnny Weissmuller
 The Emperor Jones—Bobby Jones
 Calamity Jane—Bobby Jones' Putter
 Boy Wonder—Willie Hoppe
 The Flying Finn—Paavo Nurmi
 The Fastest Human—Charley Paddock
 The Sauerkraut Line—Milt Schmidt, Bobby Bauer and Woody Dumart of the Boston Bruins

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- ABC.** See **American Broadcasting Company**
- ASCAP.** See **American Society of Composers, Authors, and Publishers**
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